Fourth Five-Year Review Report

For

Nutting Truck and Caster Site

Faribault
Rice County, Minnesota

May 2008

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List of Acronyms

1,2-DCE	1,2-Dichloroethylene
ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of Concern or Chemical of Concern
COP	Close Out Plan
GPM	Gallons-Per-Minute
HRL	Health Risk Limit
IC	Institutional Control
MCL	Maximum Contaminant Level
MDH	Minnesota Department of Health
MERLA	Minnesota Environmental Response and Liability Act
MPCA	Minnesota Pollution Control Agency
mg/L	Milligrams Per Liter (or PPM)
NPDES	National Pollution Discharge Elimination System
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PLP	Permanent List of Priorities
PPB	Parts-Per-Billion
PPM	Parts-Per-Million
RA	Remedial Action
RAO	Remedial Action Objective
RAP	Response Action Plan
RP	Responsible Party
SDS	State Disposal System Permitting Program
TCE	Trichloroethylene
ug/L	Micrograms Per Liter (or PPB)
U.S. EPA	United States Environmental Protection Agency

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Executive Summary

On behalf of the United States Environmental Protection Agency (U.S. EPA), the Minnesota Pollution Control Agency (MPCA) has completed a Fourth Five-Year Review of the Remedial Action (RA) implemented at the Nutting Truck and Caster Site ("Nutting" or "the Site") located in Faribault, Minnesota. The purpose of the review was to evaluate the effectiveness and performance of the RA in order to determine if the RA is protective of human health and the environment.

Nutting manufactured and distributed casters, wheels, hand trucks, and towline trucks at its Faribault plant. In 1984, the manufacturing operation relocated to Watertown South Dakota. Original documentation indicated that the Site consisted of an 11-acre area; however, the property owner has indicated that the actual property was 8.6 acres. The current Site property is now known as Prairie Avenue Leasing and consists of 8.6 acres. From 1959 to 1979, the company used a seepage pit in the west central area of the Site to deposit waste and sludges including waste solvents. Trichloroethylene (TCE) is the major contaminant of concern identified in the groundwater at the Nutting Truck and Caster Site.

The goal of the five-year review is to assess the status and protectiveness of the implemented remedy at sites where unrestricted use and unrestricted exposure are not yet possible due to the presence of hazardous waste remaining onsite. This fourth five-year review made the following determinations regarding the protectiveness of the remedy at the Nutting Site.

OU1 - Soil

The first operable unit (OU1) was addressed in 1980 when the contaminated soils and sludge from the onsite seepage pit at the west central area of the property were excavated and replaced with clean fill. This action was performed by the Responsible Party (RP) in response to a Notice of Noncompliance issued by the state. The area was then paved with concrete and is currently used as a loading dock/parking area. The removal of soil and subsequently installed concrete cap eliminated the potential for: 1) precipitation to facilitate the migration of contaminants through the soil; and 2) access to the former seepage pit area by potential receptors. The contamination found in the soils associated with the seepage pit was replaced with soil meeting residential clean-up levels; hence, this portion of the remedy provides long-term protection from contaminants leaching to the aquifer and from human health exposure to any residual TCE that may be in the source area. The remedy selected for OU1 is protective of human health and the environment.

OU2 - Groundwater

The groundwater operable unit (OU2) was addressed by the RP in 1987 under a Consent Order and response Action Plan (RAP) with the MPCA. The RP installed a groundwater extraction and treatment system to contain the groundwater contaminant plume and to meet contaminant clean-up goals at the Nutting groundwater compliance wells. The compliance wells are located about 900 feet downgradient of the Nutting Site property boundary. The remedy for groundwater currently protects human health and the environment because the groundwater extraction and treatment system has resulted in a significant decline in contaminant concentrations. Since the

2003 five-year review, only TCE remains in the groundwater. The RAP was amended in 2003 to reflect revised TCE clean-up goals which are consistent with the state Health Risk Limit (HRL) for TCE. The concentrations have declined such that the groundwater has achieved clean-up goals at the compliance point, allowing the groundwater extraction and treatment system to be turned off. There are no private wells used for potable water in the area between the Site property and the compliance wells; all commercial and residential properties use the Faribault municipal supply.

The remedy is considered protective in the short-term; however in order for the remedy to be protective in the long term, institutional controls (ICs) should be implemented to prevent exposure to contaminants until groundwater clean-up goals are achieved throughout the Site. Long-term protectiveness also requires compliance with the groundwater use restrictions. Compliance with effective ICs will be ensured by implementing, monitoring and maintaining effective ICs as well as maintaining the site remedy components. Long-term stewardship must be ensured to verify compliance with ICs.

Site-wide

The construction was completed for OU1 and OU2 as of September 2003 when the Final Closeout Report was approved by the MPCA. The Site is currently protective of human health and the environment in the short-term. In order for the remedy to be considered protective in the long term, the implementation of ICs will be required at the Site because the TCE levels in onsite groundwater exceed the amended clean-up goals. An Environmental Covenant and Easement is currently being prepared for the Site and will be executed within six months of this report. The MPCA requires this IC for delisting the site from the state Permanent List of Priorities (PLP). Compliance with effective ICs will be ensured by evaluating the effectiveness of the Covenant, determining whether additional ICs are needed, and strategizing for long-term stewardship. Ensuring long-term stewardship requires maintaining, monitoring, and certifying ICs at the Site in conjunction with the other Site remedy components. The MPCA will begin the process of delisting the Nutting Truck and Caster Site from the PLP upon verification that the ICs are in place and effective. The U.S. EPA will propose the site for National Priority List (NPL) delisting once groundwater cleanup goals have been met.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name *(from WasteLAN)*: **Nutting Truck and Caster Company**		
EPA ID *(from WasteLAN)*: **MND00615017**		
Region: 5	**State: MN**	**City/County: Faribault/Rice Co.**

SITE STATUS	
NPL status: **X** Final ☐ Deleted ☐ Other (specify)	
Remediation status (choose all that apply): Under Construction x Operating Complete	
Multiple OUs?* **X** YES ☐ NO	**Construction completion date:** 04/01/1987
Has site been put into reuse? **X** YES ☐ NO	

REVIEW STATUS	
Lead agency: ☐EPA **X** State ☐ Tribe ☐ Other Federal Agency _____	
Author name: Gary Krueger	
Author title: Superfund 1	**Author affiliation: MPCA**
Review period: 10/1/2007 to 5/16/2008	
Date(s) of site inspection: 11/29/2007	
Type of review: ☐Post-SARA **X** Pre-SARA ☐ NPL-Removal only ☐Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead ☐Regional Discretion	
Review number: ☐ 1 (first) ☐ 2 (second) ☐ 3 (third) **X** Other (specify) **4 (fourth)**	
Triggering action: ☐ Actual RA Onsite Construction at OU # ☐ Actual RA Start at OU#____ ☐ Construction Completion **X** Previous Five-Year Review Report ☐ Other (specify)	
Triggering action date *(from WasteLAN)*: 5/16/2003	
Due date *(five years after triggering action date)*: 5/16/2008	

Five-Year Review Summary Form cont'd.

Issues:
Institutional Controls (ICs) recommended in the 2003 five-year review need to be implemented. Implementing and maintaining ICs will be required to assure the protectiveness of the remedy. Long-term stewardship of the ICs needs to be ensured by maintaining, monitoring, and certifying ICs at the Site in conjunction with the other remedy components.

Recommendations and Follow-up Actions:
The MPCA and Responsible Party (RP) are currently working to develop an effective environmental covenant that "runs with the land," is not hindered by prior-in-time encumbrances, provides adequate notice to future owners, and will be monitored to ensure its continued existence. The covenant is expected to be in place within six months of the subject five-year review. An IC Plan will be developed and will incorporate the results of the evaluation activities and plan for additional IC activities as needed. These activities shall include: evaluating the effectiveness of the restrictive covenant; determining whether additional ICs are needed, and strategizing for long-term stewardship. The IC Plan is expected to be implemented by December 31, 2009.

Protectiveness Statements:

OU1- Soil
OU1 was addressed in 1980 when the contaminated soil and materials from the seepage pit were excavated down to below residential soil clean-up levels. The pit was backfilled with clean soil and capped with concrete. This action was performed by the RP in response to a Notice of Noncompliance issued by the MPCA. Currently, the area of the former seepage pit is a loading/parking area. The removal of soil and subsequently installed concrete cap eliminated the potential for: 1) precipitation to facilitate the migration of contaminants through the soil; and 2) access to the former seepage pit area by potential receptors. The contaminated soils associated with the seepage pit were replaced with soil meeting residential clean-up levels; hence, this portion of the remedy offers long-term protection from contaminant leaching to the aquifer and from human health exposure to any residual Trichloroethylene (TCE) that may be in the source area. The remedy selected for OU1 is protective of human health and the environment.

OU2 - Groundwater
The remedy for groundwater was undertaken by the RP in 1987 under a Consent Order and RAP with the MPCA. The RP installed a groundwater extraction and treatment system to contain the groundwater contaminant plume and to meet groundwater clean-up goals at the compliance wells. The compliance wells are located about 900 feet downgradient of the Site property boundary. The groundwater remedy currently protects human health and the environment because the groundwater extraction and treatment system has resulted in control of the groundwater plume and a significant decline in contaminant concentrations. Since the last five-year review, only TCE remains in the groundwater. The RAP was amended in 2003 to reflect revised TCE clean-up goals which are consistent with the state HRL for TCE. Trichloroethylene concentrations have declined such that the groundwater has achieved clean-up goals at the compliance point, allowing the groundwater system to be turned off. There are no private wells used for potable water in the area between the Site property and the compliance wells; all commercial and residential properties use the Faribault municipal water supply. The remedy is considered protective in the short-term; however, in order for the remedy to be protective in the long term, ICs should be implemented to prevent exposure to contaminants until groundwater clean-up goals are achieved throughout the Site. Long-term protectiveness also requires compliance with the groundwater use restrictions. Compliance with effective ICs will be ensured by implementing, monitoring and maintaining effective ICs as well as maintaining the site remedy components. Long-term stewardship must be ensured to verify compliance with ICs.

Site-wide
OU1 and OU2 construction was completed September 2003 when the Final Closeout Report was approved by the MPCA. The Site is currently protective of human health and the environment in the short term. In order for the remedy to be protective in the long term, the implementation of ICs will be required at the Site because the TCE levels in onsite groundwater exceed the amended clean-up goals. An Environmental Covenant and Easement is currently being prepared for the Site and will be executed within six months of this report. Compliance with effective ICs will be ensured by evaluating the effectiveness of the Covenant, determining whether additional ICs are needed, and strategizing for long-term stewardship. Ensuring long-term stewardship requires maintaining, monitoring, and certifying ICs at the Site in conjunction with the other Site remedy components.

Five-Year Review Summary Form cont'd.

Other comments: None

Date of last Regional review of Human Exposure Indicator (from CERCLIS): **01/29/2008**
Human Exposure Survey Status (from CERCLIS): **Current Human Exposure Controlled**
Date of last Regional Review of Groundwater Migration Indicator (from CERCLIS): **05/31/2007**
Groundwater Migration Survey Status (from CERCLIS): **Contaminated Groundwater Migration Under Control**
Ready for Reuse Determination Status (from CERCLIS): **Not Available**

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Five-Year Review Report

I. Introduction

The Purpose of the Review

The purpose of the five-year review is to determine whether the remedy at the Site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and recommendations to address them.

Authority for Conducting the Five-Year Review

The Minnesota Pollution Control Agency (MPCA), in consultation with the United States Environmental Protection Agency (U.S. EPA), prepared this five-year review pursuant to CERCLA §121 and the National Contingency Plan (NCP). CERCLA §121 states:

> *If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The agency interpreted this requirement further in the National Contingency Plan (NCP); 40 CFR §300.430(f)(4)(ii) states:

> *If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

The MPCA, in consultation with the U.S. EPA Region 5, conducted a five-year review of the remedial actions implemented at the Nutting Truck and Caster Site in Faribault, Minnesota. This policy review was conducted from October 2007 through May 2008. This report documents the results of the review conducted with the assistance of MPCA contractor, Delta Consultants of St. Paul, Minnesota.

This is the fourth five-year review for the Nutting Truck and Caster Site. The triggering action for this review is the date of the previous five-year review, as shown in U.S. EPA's CERCLIS database: May 16, 2003. This five-year review was conducted by the MPCA in conjunction with and according to U.S. EPA's policy to conduct a five-year review

when clean-up levels attained do not allow for unlimited and unrestricted exposure. Once Site remedial action goals are met, the Site will allow for unlimited use and unrestricted exposure, and five year reviews will no longer be needed.

II. Site Chronology

Table 1 – Chronology of Significant Site Events

Date	Event
1891-1984	Nutting Manufactured and distributed casters, wheels, hand trucks and towline trucks at its Faribault facility.
1959-1979	Nutting begins using an onsite disposal/seepage pit in the northwest corner of the land depression to dispose of waste and sludges and solvents.
1979	MPCA issues a Notice of Noncompliance to Nutting regarding past disposal practices.
1979-1983	Nutting installs six monitoring wells at the Site which showed the ground beneath seepage pit was contaminated.
Sept. 16-17, 1980	The disposal pit at the Site was excavated and disposed of under the State Disposal System Permit Program.
Sept. 8, 1983	Nutting placed on U.S. EPA's National Priorities List.
April 26, 1984	MPCA issues Order to Nutting requiring it to conduct an RI
1984	Faribault facility is closed; manufacturing operations move to Watertown, S.D.
1984-1986	Remedial investigations are conducted by Nutting
February 1987	Nutting submits a Response Action Plan (RAP) to MPCA to operate and maintain the groundwater remedy at the Site. The RAP for a Minnesota-lead site is analogous to a Record of Decision (ROD) at a federal-lead site.
March 24, 1987	MPCA approves the Request for Response Action (RFRA) and the RAP
Sept.22, 1987	MPCA issues a second Consent Order requiring Nutting to develop and implement the Response Action Plan (RAP) for groundwater remediation.
Nov. 1987-2004	Nutting operated a groundwater pump and treat system at the Site
March 29, 1994	First Five-Year Review completed
March 31, 1998	Second Five-Year Review completed
June 2, 2000	ATSDR completes a Health Consultation for the Site
2003	RAP amended to use HRL/MCLs as new clean up goals.
May 16, 2003	Third Five-Year Review completed

Sept. 25, 2003	The Nutting Company completes the Final Close Out Report as recommended in the previous five-year review.
June 2004	Nutting revises the Long Term Monitoring Plan changing the groundwater sampling schedule from annual to semi-annual monitoring events.
July 2004	The pump and treat remedy is turned off after clean up goals are achieved
October 2007	The MPCA approves revised long term monitoring plan to change from semi-annual to annual groundwater monitoring

III. Background

Physical Characteristics

The Nutting Truck and Caster Company ("Nutting") was formerly located at 1221 Division Street in the city of Faribault, Rice County, Minnesota. Between 1891 and 1984, Nutting manufactured and distributed casters, wheels, hand trucks, and towline trucks at its Faribault plant. Original documentation indicated that the Site consisted of an 11-acre area; however, the property owners, Stewart and Shirley Shaft ("the Shafts"), have indicated that the actual Site property was 8.6 acres. In 1984, the Shafts sold the Nutting manufacturing operation to Faultless. The operation was relocated to Watertown, South Dakota as the Faultless Nutting Division of a larger corporate entity. The Shafts reconstituted their business as the Prairie Avenue Leasing Company, which occupies the current Site property consisting of about 8.6 acres. The property is bounded on the west by Prairie Avenue and on the southeast by railroad tracks. The north property line is approximately 250 feet south of Division Street (see Figures 1 and 2). The property is accessed via Prairie Avenue.

Faribault is a community of approximately 20,818 residents, as per the 2000 census, and is situated at the confluence of the Cannon and Straight Rivers in Southern Minnesota. The Cannon River is about one mile north of the Site and the Straight River is located about one mile east of the Site. Faribault is located along Interstate 35 and is about 30 miles south of the Minneapolis/St. Paul metropolitan area. The city high school and a technical college are located one block southeast of the Site. The city of Faribault operated five municipal wells, the nearest of which was approximately one-half mile north and downgradient of the Nutting property. The direction of groundwater flow is to the northeast (see Figure 1).

Land and Resource Use

The historic land use for the Site between 1891 and 1984 included manufacturing and distribution. Beginning in 1959 the facility disposed of waste materials in a seepage pit located in the west central portion of the Site. In response to a 1979 Notice of Noncompliance issued by the MPCA, Nutting excavated the seepage pit, backfilled it with clean fill, and capped the area. In 1984 the Nutting Company moved its operation to South Dakota.

Adjacent land was previously utilized for agricultural purposes and now consists of mixed low and medium-density residential, commercial, and light industrial use. The current Site is an 8.6-acre property leased for commercial and light industrial purposes. The current occupants of the property include an active manufacturing facility and warehouse, and an active welding shop. A wood shop occupying the central 60,000 square feet of the property was demolished in 1995. A vacant former foundry building sits in the northeast corner of the property. The downgradient area between the northern Site boundary and Division Street are occupied by two private residences, some office buildings and a self-storage facility. All properties adjacent to and downgradient of the Site are connected to the Faribault municipal drinking water supply. At the present time, there are no known planned land use changes for this Site or any surrounding properties (see Figures 2 and 3).

History of Contamination

From 1891 through 1984 the Nutting Company manufactured and distributed casters, wheels, hand trucks and towline trucks at its Faribault facility. A surface depression was located on the south side of the manufacturing building and, prior to 1979, foundry and other wastes were disposed of in the surface depression which was an abandoned gravel pit. In 1959 the company began using a seepage pit in the west central area of the Site (and the northwest corner of the surface depression) to deposit waste and sludges including waste solvents. The seepage pit covered an area of approximately 3,200 square feet and was about 13 feet deep. The upper three to four feet of the seepage pit consisted of sludge material. The MPCA issued a Notice of Noncompliance to the Nutting Company in 1979 for their past disposal practices. After 1979, all wastes were disposed of either at offsite permitted facilities or through the city of Faribault sanitary sewer system.

In October and November 1982 well water analysis from the Faribault municipal wells indicated that all five municipal wells were contaminated with Trichloroethylene (TCE) and 1,2-dichloroethylene (1,2-DCE), a "daughter" product formed from degraded TCE. In 1983 the Nutting Truck and Caster Site was placed on the U.S. EPA National Priority List (NPL).

Initial Response

Beginning in the late 1970's, Site remediation activities have been occurring under the oversight of MPCA relying on state authority. Subsequent to its passage, the Nutting Site was addressed under the Minnesota Environmental Response and Liability Act (MERLA) of 1983, which was enacted to investigate and clean up releases of hazardous substances, pollutants or contaminants. This authority was the basis for later remedial activities at the Site. Under this authority, the MPCA has administered the Enforcement Deferral Pilot project at the Nutting Site since October 1, 1994. The pilot project was meant to demonstrate full accountability for state enforcement lead Superfund sites without federal oversight or intervention. The purpose of the pilot was to gather information that could be used to demonstrate MPCA's capability for state authorization or referral.

In response to the 1979 MPCA Notice of Noncompliance, the Nutting Company performed a Remedial Investigation (RI) to determine the nature and extent of

contamination in the soil in and around the Site. Pursuant to the 1979 Notice and the results of the RI, Nutting excavated the materials and contaminated soils from the former seepage pit, backfilled the excavation with clean soil, and capped the area with concrete in 1980. The Site was placed on the U.S. EPA NPL on September 8, 1983. A Request for Response Action (RFRA) was issued to the Nutting Company by the MPCA on September 22, 1983, and a Response Order by Consent ("Consent Order" or "Order") was issued on April 26, 1984. The Order required the company to conduct another RI for the groundwater and to make a recommendation to the MPCA Director regarding the need for a remedial action/feasibility study.

Further remedial investigations were conducted in 1984, 1985, and 1986. The investigations showed that the upper aquifer is comprised of the uppermost geologic unit (glacial outwash), which is underlain by the St. Peter Sandstone. Together these units comprise the shallower or upper alluvial aquifer. The base of the St. Peter Sandstone is shaley, but the presence of dissolved contamination beneath the shale zone indicates that the basal St. Peter retards but does not prevent vertical migration of groundwater. The Prairie du Chien Group (Oneonta and Shakopee Dolomites and New Richmond Sandstone) underlies the St. Peter Sandstone, and comprises the lower Prairie du Chien Aquifer, which is used as the drinking water aquifer. The lateral hydraulic gradient in the upper aquifer and in the Prairie du Chien aquifer is to the north. Water level measurements during the RI and subsequent data confirmed a slight upward vertical hydraulic gradient between the Prairie du Chien Aquifer and the upper aquifer.

The MPCA staff concluded that a possible remedial action/feasibility study as described in the 1984 Order was not necessary since the major source of contamination, i.e., the seepage pit soils, had been removed and properly disposed of in 1980.

A second RFRA was issued by the MPCA directing Nutting to develop and implement a Response Action Plan (RAP) for groundwater remediation. In response to the RFRA, Nutting submitted a RAP to MPCA on February 6, 1987. On March 24, 1987, the MPCA approved the RAP which called for extraction and treatment of contaminated groundwater. The RAP also included a groundwater monitoring plan. A Consent Order was issued to Nutting in September 22, 1987 which included the RFRA and RAP as exhibits to the Order. The Order required Nutting to pump out contaminated groundwater until a concentration of 50 micrograms-per-liter (ug/L) or parts-per-billion (ppb) of TCE was consistently achieved in the alluvium at the Nutting property boundary. The Nutting Company subsequently installed and began operating a groundwater extraction and treatment (pump-and-treat) system in 1987. The system utilized a gravity induced cascade treatment onsite to treat extracted groundwater which was discharged to Crocker's Creek via the municipal storm sewer after treatment.

Basis for Taking Action

Contamination found onsite affected both the soil and groundwater. The primary soil contamination was found at the seepage pit located toward the west central portion of the property. The average concentrations of TCE and methylene chloride in the seepage pit sludge were 0.44 milligrams per kilogram (mg/kg) or parts-per-million (ppm) and 456 ppm, respectively. The sludge also contained some heavy metals such as cadmium, chromium and lead. On September 16-17, 1980, the contaminated soils and sludge from the seepage pit were excavated and replaced with clean fill. The area was then paved with concrete and is currently utilized as a loading dock/parking area. This

cleanup has effectively limited the potential risk to human health by eliminating the source and as well as eliminating potential contact with the contamination that was in the seepage pit. Removing the contaminated soil has also eliminated the ecological risks that were formerly associated with the seepage pit. Covering the area over the former seepage pit with concrete has prevented any possible contact, for flora, fauna or humans with the former seepage pit.

TCE was the major contaminant of concern (COC) identified in the groundwater at the Nutting Truck and Caster Site. The water quality monitoring data collected during the RI detected TCE (at concentrations up to 570 ug/L or ppb) and 1, 2-DCE in shallow groundwater downgradient of the former seepage pit. TCE was consistently detected at concentrations less than 35 ppb in samples from one Prairie du Chien Aquifer monitoring well (W-13), *located onsite and immediately downgradient of the former seepage pit* location. TCE has not been detected in samples from the three Prairie du Chien offsite monitoring wells which are north and downgradient of the Site (see Figure 3).

As mentioned, the city of Faribault's municipal water supply was also found to be contaminated with trace levels of TCE and daughter products. Since one of the municipal wells (well #4) was downgradient of the Nutting Site, the Site was identified as a potential source of the contamination. After further investigations of other sources affecting the Faribault municipal water supply, the MPCA and Minnesota Department of Health (MDH) concluded that the source of TCE contamination in the municipal well #4 did not appear to be related to the Nutting Truck and Caster Site.

The MDH Health Risk Limits (HRLs) for TCE and other volatile organic contaminants were promulgated in the early 1990s, after the 1987 RAP cleanup goal of 50 ppb was set. The MDH did, however, use Recommended Allowable Limits (RALs) as advisory levels that were available before the HRL rules were promulgated. The RALs were used to predict any potential adverse effects that may result from contaminated drinking water and were derived through a quantitative risk assessment process that used data on the most sensitive health effect produced by the smallest amount of the chemical. Safety factors were added to produce the guidelines, building an extra margin of protection into the final RAL numbers. The RAL for TCE was set at 30 ppb based on its ability to increase the risk of cancer. At that time, the RAL for TCE was being exceeded by the groundwater samples collected and was the basis for taking action.

The HRLs have since replaced the RALs and are calculated using the same methodology as for the RALs; hence, the HRL for TCE was also set at 30 ppb. The HRLs reflect health effects data only--they do not incorporate economic or technological factors such as treatment cost and treatment feasibility, as do the federal drinking water standards-- the Maximum Contaminant Levels (MCLs)[1]. Health Risk Limits are used by public agencies and private entities in Minnesota to determine whether concerns about human health require that groundwater impacted by human activity be subject to

[1] Legislation passed in the 2007 regular session established HRLs for all contaminants in private domestic wells to be the more stringent of either the state standards (i.e., HRLs) or the federal standards determined by EPA (i.e., MCLs, which apply to public water supplies and can incorporate factors unrelated to risk calculations). These limits apply until MDH adopts rules setting an MDH-derived HRL value for these chemicals. Eleven chemicals, including TCE have MCL values that are lower than the 1993/1994 HRL values. The MCL-based HRL were adopted for these 11 chemicals, effective July 1, 2007. The MCL-based HRL value promulgated on July 1, 2007 for TCE will remain in effect until MDH revises the HRL rules.

regulatory or advisory actions. HRLs specify a minimum level of quality for water used for human consumption (i.e., ingestion of water). The MPCA policy is to utilize the HRL criteria and possible risk to human receptors to determine best management practices and action levels appropriate for each site. The MPCA also uses HRLs to advise consumers and owners of private drinking water wells that are not regulated by the MDH. HRLs are also utilized to evaluate options to reduce exposure when no federal standard exists; evaluate environmental projects; evaluate Site impacts on public health and to make recommendations.

IV. Remedial Actions

Remedy Selection

There were two operable units (OU) identified for this Site. The first OU (OU1) was the soil cleanup and the second OU (OU2) was the groundwater remediation.

OU1 - Soil

When the state of Minnesota issued a Notice of Noncompliance to the Nutting Company in 1979, Nutting responded by excavating the contaminated soil and materials from the seepage pit located at the west central area of the property. This removal resulted in soil contaminant levels below the MPCA's residential soil clean-up goals. The pit was then backfilled with clean soil and capped with concrete.[2] Currently, the area of the seepage pit is a loading/parking area. The removal of soil and the subsequently installed concrete cap eliminated the potential for precipitation to facilitate the migration of contaminants through the soil as well as access to the former seepage pit area by potential receptors.

OU2 - Groundwater

As mentioned, a RFRA was issued to the Nutting Company by the MPCA on September 22, 1983, followed by a Consent Order on April 26, 1984. The Order required the company to conduct an RI and to make a recommendation to the MPCA Director regarding the need for a remedial action/feasibility study.

In September 1987 the MPCA and the Responsible Party (RP), i.e., the Nutting Company, signed a second Consent Order requiring Nutting to perform the remedial action. The U.S. EPA was not a signatory to the Order. A RAP was attached as "Exhibit A" to the Consent Order and was required to be implemented. The OU of concern addressed in the 1987 RAP was solely groundwater, as the soil contamination had been addressed in 1980 under the 1984 Consent Order. The Nutting Company implemented the RAP by installing a groundwater extraction and treatment system to mitigate migration of the groundwater contaminant plume from the Nutting Site in order to ensure protection of the downgradient aquifers for future use as a potable water supply. The design calculations associated with groundwater extraction and treatment system indicated that a clean-up level of 50 ppb for TCE in the alluvial aquifer units would

[2] The term "cap" is used to denote a cover and should not be confused with a regulatory landfill cap used at solid and hazardous waste landfills.

achieve the RAP goal of ensuring protection of the downgradient deeper Prairie du Chien Aquifer; hence, the RAP required that the TCE levels in groundwater could not exceed 50 ppb at monitoring wells B-15 and B-16.[3] These compliance wells were located north of Division Street and were the closest downgradient wells to the property boundary--about 350-400 feet downgradient of the Nutting property boundary.

Two extraction wells (also referred to as "pumping" or "recovery" wells) were installed: PW-17 in the glacial outwash and PW-18 in the St. Peter Sandstone aquifers underlying the Site. The combined extraction rate of up to 50 gallons-per-minute (GPM) was expected to capture the TCE plume in the affected St. Peter and glacial outwash aquifers. Effluent from the two extraction wells flowed through the groundwater treatment system, i.e., a gravity-induced cascade to remove TCE, to the storm water catch basin at Lincoln Avenue and Division Street. From the catch basin, the discharge flows three blocks to the discharge point at Crocker's Creek. Crocker's Creek flows northward to the Cannon River. The discharge is regulated under the National Pollution Discharge Elimination System (NPDES) and the State Disposal System (SDS) Permit Program.

Remedy Implementation

OU1 - Soil

In 1980, Nutting excavated the former seepage pit removing soils considered to be the source of contamination. After the source was excavated, clean soil was backfilled into the excavation area and a concrete cap was placed over the seepage pit area. This remedy effectively eliminated any risk to human health and the environment at OU1. Excavation and disposal activities were completed by Nutting under MPCA oversight prior to the 1987 RAP. MPCA considered the excavation and disposal activities to be adequate and complete.

OU2 - Groundwater

As mentioned, in 1987 the Nutting Company developed and implemented a RAP to address groundwater contaminated with TCE. The RAP required a groundwater pump-and-treat system with two extraction wells (PW-17 and PW-18). The system utilized a gravity induced cascade to remove TCE contamination from the groundwater, which was discharged to Crocker's Creek via a nearby municipal storm sewer. The treatment system effectively captured and treated TCE affected groundwater from its startup in 1987 until it was discontinued in July 2004. The plume containment is documented by the absence of detected contaminants in monitoring wells downgradient of the groundwater treatment system. Mann-Kendall statistical analysis confirms declining contamination trends seen in the groundwater at the Nutting Site. The RAP also established a Long Term Groundwater Monitoring Plan. The monitoring plan was revised on September 22, 1987 and January 17, 1992 as modifications of the Consent Order. On January 27, 1998, the MPCA modified the groundwater sample collection frequency from semi-annual to annual in accordance with the revised monitoring plan.

[3] It is likely that the design calculation which produced the 1987 RAP cleanup goal of 50 ppb for TCE in the shallower alluvial aquifers was based on the goal of not exceeding a TCE level of 30 ppb in the downgradient Prairie du Chien Aquifer. At that time, the RAL (and later the HRL) for TCE were 30 ppb, which was considered protective for drinking water exposures.

In January 2002, the MDH, as the agency responsible for enforcing safe drinking water, recommended that the HRL for TCE be changed from 30 ppb, a value it had used since the early 1990's, to five ppb. This value coincides with the U.S. EPA Maximum Contaminant Levels (MCLs) for TCE under the Safe Drinking Water Act. The MCL is based on the health risks to humans, but is modified by the costs of detecting and removing the contaminant through treatment. An HRL is the concentration of TCE in water that the MDH has determined to be safe for daily human consumption over a lifetime, but does not take into effect other feasibility factors as does the MCL. The HRLs are derived as human health-based groundwater standards based on cancer or noncancer effects from consumption or MCL-based HRLs adopted by reference or provided by Minnesota Session Laws 2007 Chapter 147, Article 17, Section 2. These MCL-based HRLs are adopted for use as HRLs.

In May 2003, the third five-year review was completed for the Site. The review stated that the groundwater remediation goal of 50 ppb for TCE was not adequately protective of human health and the environment. During the five-year review, TCE contamination was observed to be below the RAP clean up level of 50 ppb, but still above the then-proposed MCL/HRL of five ppb in some samples. The MDH and U.S. EPA have determined that groundwater meeting the current MCL/HRL poses no health risks for unlimited use by human or other ecological receptors.

In response to these findings, the Nutting Company prepared a second RAP in July 2003 (*Barr Engineering, 2003*) that identified clean-up goals meeting the MCL/HRL of five ppb for TCE contamination. A Final Close Out Report was prepared in September 2003 (*Barr Engineering, 2003*) indicating that the clean-up goals stated in the 2003 RAP had been achieved since the TCE in the groundwater compliance wells (B-15 and B-16) had been reduced to below 50 ppb or less for two successive samplings[4]. The average concentrations in samples from wells B-15 and PW-17 has been five ppb, (i.e., equivalent to the proposed MCL/HRL), since 1989 and 1992, respectively.

The TCE concentrations in samples from the sentinel wells (glacial drift wells B-6, B-11 and B-12, St. Peter Sandstone wells B-7, B-8 and B-9, and Prairie du Chien wells W-10 and W-14) had rarely exceeded one ppb for TCE since the wells were installed during the RI. Several of the sentinel wells were permanently sealed due to requests from property owners. The remaining sentinel wells included B-8, B-12, and W-14.

In June 2004, a Revised Long Term Monitoring Plan (*Barr Engineering, June 2004*) was issued to establish a two-tiered monitoring plan (Tier 1 and Tier 2) and outlined the criteria for shutting down the groundwater pump-and-treat system at the Nutting property, as well as the criteria and a contingency plan for restarting the groundwater treatment system, if warranted (see Figure 4). The plan also revised the sampling frequency from annual to semi-annual in order to provide increased monitoring during the initial closure period of the groundwater pump-and-treat system. The plan also re-assigned wells in the monitoring network so that the downgradient groundwater compliance wells were now B-8 (St. Peter Sandstone Aquifer), B-12 (glacial drift Aquifer) and W-14 (Prairie du Chien Aquifer). These newly-appointed compliance wells are 900

[4] Well B-16 was never used as a monitoring well for the groundwater extraction and treatment system because it was permanently sealed in fall 1987 when the city of Faribault widened Lincoln Avenue. TCE levels in samples from B-15 and PW-17 and PW-18 have not exceeded 50 ppb since 1988.

feet downgradient of the Nutting Site boundary, whereas the previous compliance wells were about 450 feet downgradient of the Site boundary (see Figure 5). This increased distance to the compliance wells was acceptable because all potential receptors in the area used the Faribault municipal water supply as the source for drinking water. Further, the Faribault municipal well (Well No.4) that had been contaminated, and was located in this area, had been removed from service. [5]

While the groundwater extraction system operated, the Tier 1 Monitoring Plan was in effect. This plan specified annual surface water monitoring to include the final effluent at Crocker's Creek and the catch basin outfall. Annual groundwater sampling was performed at certain wells (see Table 2).

In July 2004, the groundwater pump and treat system was turned off and PW-17 and PW-18 were converted to monitoring wells. Discontinuation of the pumping was not expected to adversely affect the downgradient water quality based on persistently low TCE levels in these wells and trace (less than 1 ppb) to nondetectable TCE levels in the compliance wells. At the time the groundwater pump-out system was shutdown, Tier 2 of the Long Term Monitoring Plan was implemented in order to evaluate plume stability. Tier 2 requires semi-annual sampling events when the treatment system is not in operation and was expected to be in effect for six years, with recommendations for changes to the monitoring plan regarding the wells, frequency, and length of time for monitoring to be made as needed. This time frame was based on the Site's average groundwater flow velocity of 250-300 feet per year.

Table 2 - Nutting Site Long Term Monitoring Program

Wells Sampled	**Condition Evaluated**	**Tier 1*** (Annual)	**Tier 2*** (semi-annual)
B4	Source Area Water Quality	VOCs/ Method 8260	VOCs/ Method 8260
B8	Downgradient compliance/sentinel	VOCs/ Method 8260	VOCs/ Method 8260
B12	Downgradient compliance/sentinel	VOCs/ Method 8260	VOCs/ Method 8260
W13	Source Area Water Quality	VOCs/ Method 8260	VOCs/ Method 8260
W14	Downgradient compliance/sentinel	VOCs/ Method 8260	VOCs/ Method 8260
PW17	Aquifer Conditions	VOCs/ Method 8260	VOCs/ Method 8260
PW18	Aquifer Conditions	VOCs/ Method 8260	VOCs/ Method 8260
NPDES Permit Monitoring			
Catch Basin Outfall	Surface Water	Oil and Grease, TOC, pH	N/A
Crocker's Creek Outfall	Surface Water	Oil and Grease, TOC, pH	N/A

* VOC parameters included 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE and 1,1,2-TCE

[5] Several investigations were performed by MPCA to determine the source of trace TCE contamination in the Faribault municipal well field. In 1999, MPCA concluded that the Nutting Site was not a source of the TCE affecting the Faribault wells.

Tier 2 also described a contingency plan based on the non-parametric statistical Mann-Kendall tests to determine if water quality meets the criteria required for Site closure. If the data indicate that the criteria are not being met, the groundwater extraction system would be restarted and Tier 1 monitoring would be resumed. Mann-Kendall calculations are utilized to evaluate sequential data points to determine if they have any correlation or trend with previous data points. Ultimately, a trend can be determined (increasing, decreasing, or stable) for a given contaminant in the groundwater. Mann-Kendall spreadsheets and plots can be seen in Appendix C.

In October 2007, the MPCA approved the return to annual sampling due to evidence of steadily decreasing TCE concentrations below the 2003 amended RAP goal of five ppb. Current TCE contamination, and contamination associated with TCE daughter products such as 1,1-DCE and *cis/trans* -1, 2-DCE, meets MCL/HRL requirements for safe drinking water at the compliance monitoring wells.

Institutional Controls

Institutional controls (ICs) are non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for exposure to contamination and protect the integrity of the remedy.

There are many different types of ICs that can be used at a site, although the two major types are governmental controls and proprietary controls. Governmental controls are ICs implemented and enforced by a state or local government, such as zoning restrictions, ordinances, statutes, building permits, or other provisions that restrict land or resource use at a site. Local governments have a variety of land use control measures available. Proprietary controls are property use restrictions issued by property owners, such as easements and covenants. These controls involve legal instruments placed in the chain of title of the site or property.

Occasionally, several types of ICs are used or "layered" for extra measures of safety. The U.S. EPA and MPCA, as part of a cleanup, will require placement and compliance with various types of ICs to ensure long-term protectiveness for any site areas that do not allow for unlimited use or unrestricted exposure to residual contaminants. Table 3 below summarizes the ICs that are being prepared for the Nutting Site.

Table 3 - Institutional Controls Summary Table

Media, Engineered Controls, & Areas that Do Not Support UU/UE Based on Current Conditions.	IC Objective	Title of Institutional Control Instrument Implemented
Groundwater – current area that exceeds groundwater clean-up standards identified in Figure 5.	Prohibit groundwater use until clean-up standards are achieved; Prohibit use of private wells and residential use of site property which overlies contaminated groundwater. All monitoring and extraction wells at the Site will be abandoned to meet state requirements.	An Environmental Covenant and Easement has been planned and is currently being developed. An IC plan will be developed by the State within 6 months to incorporate the results of the evaluation and plan for additional IC activities as needed, including additional evaluation activities. These activities shall include evaluating the effectiveness of the environmental covenant; determining whether additional ICs are needed; and planning for long-term stewardship.
	Inform new property owners of the number and location of each well on the property.	State law requires sellers of property to disclose to potential buyers at the time of sale the locations and status of all wells on the property being sold (Minnesota Statute 103I.235, subdivisions 1(a) and 2.

Physical Area:

The Figure 2 shows the Site legal boundaries. These boundaries contain those areas that do not support unlimited use and unrestricted exposure (UU/UE). In addition, the property directly north of the site boundary extending past Division Street to PW-17 and PW-18 is underlain by the contaminated groundwater plume and does not support UU/UE either. Table 3 above summarizes ICs for these restricted areas.

Decision Document:

The decision documents for the Nutting Site that address site remediation include the September 22, 1987 Consent Order and the attached RFRA and RAP exhibits. Institutional controls were not identified as necessary to the remedy in these decision documents because the remedy will allow for UU/UE once the groundwater standards are met. The MPCA has determined that ICs in the form of an Environmental Covenant and Easement will be required before delisting this Site from the state's permanent list of priorities (PLP). Therefore, MPCA is pursuing an IC and an Environmental Covenant and Easement is currently being prepared.

The MPCA and the current owners of the Site property will enter into an Environmental Covenant to ensure that the Superfund actions taken will remain protective of public health. This Covenant will be entered into under Minnesota Statute 114E, the state's

Uniform Environmental Covenants Act (UECA). This act conforms to the National UECA which was developed by the National Conference of Commissioners of Uniform State Laws, which promotes uniformity of state laws. This UECA was developed by the Uniform Law Commissioners to advance a national approach to ICs for risk-based cleanups, and was first encouraged by U.S. EPA.

The Minnesota version of UECA, passed in 2007, was enacted to conform to Minnesota's environmental laws and practices. The state version was passed with cooperation from the MPCA and the State's Attorney Generals Office.

Major Provisions of the Minnesota UECA include:

- An environmental agency, (i.e., the MPCA) must approve the covenant,
- The covenant must be related to an environmental response action,
- The covenant is interest in the property and runs with the land (binds future land owners),
- The covenant may be acquired and held by the environmental agency or may be held by the owner of the property or other party,
- The covenants are perpetual,
- The covenants are not automatically extinguished by marketable title laws, tax forfeiture or adverse possession,
- The covenant is enforceable by local units of government and local governments are given access to inspect for violations to exercise enforcement authority,
- The covenant can be modified or terminated by consent of the environmental agency, current owner and the original signer, or by court proceeding,
- The state can use civil and administrative penalties to enforce covenants.

In addition, there are annual compliance reporting requirements by the property owner to the MPCA, and the original owner (grantor) must waive right to consent to covenant termination once the owner transfers title to another person. The grantor must also disclose if other persons have an interest in the property (mortgages, easements, etc.), and mortgage holders' interest must be subordinate to the requirements of the covenant. Any future activity on the property is not absolutely limited, but does require prior MPCA approval; and MERLA affidavits or other long term requirements, can be incorporated into the covenant.

Compliance with ICs is required to assure long-term protectiveness for any areas which do not allow for UU/UE. The source of contamination in the seepage pit was excavated, clean soil meeting residential standards was used to backfill the excavation area and a concrete cap was placed over the seepage pit area. This remedy effectively eliminated any risk to human health and the environment. The ICs are needed for the groundwater beneath the site property since TCE concentrations in wells within the source area, B-4 and W-13, continue to exceed the clean-up goal of 5 ppb. The existing compliance monitoring wells B-8, B-12 and W-14, located about 900 feet downgradient of the Nutting Company property boundary, have met current clean-up goals. The monitoring wells PW-17 and PW-18, located about 450 feet downgradient of the Site boundary are declining without further active remediation treatment.

Objectives:

The objectives of the ICs at the Nutting Site are to prohibit groundwater use until clean-up standards are achieved. The Site property is currently zoned for commercial/ industrial use. Any proposed changes in the current land-use classification would require notification of the MPCA to determine whether additional remedial actions would need to be undertaken in order to obtain approval for the proposed land use. All monitoring and extraction wells at the Site will be abandoned according to state requirements. Institutional controls have not been implemented at this time, however, an Environmental Covenant and Easement is currently being finalized between the MPCA and the grantor, Shirley and Stewart Shaft of Prairie Avenue Leasing Company. At that time, the covenant will be reviewed to determine whether and how effectively it will meet the objectives of the ICs for this Site.

Current Compliance:

Based on inspections and interviews, neither the U.S. EPA nor MPCA is aware of any uses of the Site including groundwater which are inconsistent with the objectives which will be served by the planned ICs. There is no evidence of Site or groundwater uses which are inconsistent with objectives of the required use restrictions. There appears to be compliance with the stated objectives of areas requiring use restrictions. No one is being exposed to site-related contaminants. There are no drinking water supply wells installed within the impacted groundwater area. Access to the site is limited. Restrictions on site access and groundwater restrictions appear to be functioning as intended. Further, there was no evidence of impairments of the remedial action components at the Site. Long-term compliance with ICs will be accomplished by implementing an IC Plan, which will include various activities such as mapping and a title search, and by providing for long-term stewardship of the Site, which includes maintaining and monitoring effective ICs for the long term. To that end, a land use plan will be developed by MPCA which will include maintaining and monitoring effective ICs including mechanisms to ensure regular inspections of ICs.

Long-Term Stewardship:

Since compliance with ICs is necessary to assure the protectiveness of the remedy, planning for long-term stewardship is required. Long-term stewardship involves assuring effective procedures are in place to properly maintain and monitor the site. Long-term stewardship will ensure effective ICs are maintained and monitored and the remedy continues to function as intended with regard to ICs. A plan shall be developed (or O&M plan updated) to include procedures to ensure long-term IC stewardship such as regular inspection of ICs at the site and annual certification to U.S. EPA that ICs are in place and effective. Also, development of a communications plan and use of the State's one call system shall be explored.

IC Activities Underway and IC Plan to be Undertaken:

The MPCA, Barr Engineering, and the RP are currently working to develop an effective restrictive covenant that "runs with the land," is not hindered by prior-in-time encumbrances, provides adequate notice to future owners, and will be monitored to ensure its continued existence. The covenant is expected to be in place within six months of the five-year review period.

An IC study has been requested from the RP and IC evaluation activities are in progress. Once the IC evaluation activities have been completed, an IC plan will be developed within six months. The Plan will incorporate the results of the evaluation activities and plan for additional IC activities as needed. These activities shall include: evaluating the effectiveness of the restrictive covenant; determining whether additional ICs are needed, and planning for long-term stewardship.

System Operations/O&M

Beginning in 1987 the system operated with routine maintenance. The initial cost to install the system in 1987 was approximately $55,000. Since 1987, average annual operation and maintenance costs were approximately $12,000 per year. These costs are estimates from Barr and are assumed to include the cost of onsite monitoring activities. There is no record of unusual costs outside of anticipated annual operation and maintenance. In July 2004, operation of the groundwater pump and treat system was discontinued.

Data generated prior to the last five-year review in 2003, showed some fluctuation in contaminant concentrations at onsite monitoring wells (B4 and W13) in the vicinity of the source area. The nature of the increase in TCE concentrations in these wells had not been determined. However, the remedy effectively restricted the flow of contaminants beyond the extraction wells located just north of the property boundary prior to shutting down the pump-and-treat system.

The Site is currently monitored under a Long Term Monitoring Plan (*Barr Engineering, June 2004*). The two tiered plan outlines a monitoring schedule that applies when the groundwater treatment system is operational (Tier 1) and one that applies when the system is turned off as well as a contingency plan (Tier 2) (see Table 2). As mentioned, Tier 2 is currently being implemented at the Site. The contingency plan outlines criteria for restarting the treatment system should trends in contamination levels demonstrate an increase over an eight-year period of time (see Figure 4). As of sampling data collected annually between April 2003 and May 2007, trends in TCE contamination levels indicate a stable or declining contaminant plume. Trichloroethylene concentrations in the source area wells, B-4 and W-13, continue to exceed the five ppb. The compliance monitoring wells B-8, B-12 and W-14, located about 900 feet downgradient of the Nutting Site property boundary, have met current clean-up goals as TCE concentrations are below five ppb at those locations. The monitoring wells PW-17 and PW-18, located about 450 feet downgradient of the Site boundary are declining without further active remediation treatment. PW-17 at 3.2 ppb meets the five ppb clean-up level, while PW-18 at 6.6 ppb slightly exceeds the clean-up level (see Figure 5).

There have been no problems encountered in implementing the O&M for the system. The site monitoring well network currently consists of eight wells. Four wells had been removed from the network at the Site prior to the previous five year review. Wells B7 and W-10 were last sampled August 2, 1996. Monitoring well B6 was last sampled on November 21, 1996. Monitoring well B-15 was last sampled on April 17, 2003. Well B-15 was abandoned when PW-17 and PW-18 were converted from extraction wells to monitoring wells.

V. Progress Since the Last Review

The data included in the 2003 five-year review appears to span 1998 through 2002. The data available that was reviewed for this fourth five-year review includes April 2003 through May 2007; however monitoring data in 2005 – 2007 were collected twice per year. The data show that the concentrations of contaminants in the wells have further decreased and can be summarized as follows:

Wells B-8, B-12, W-14 have shown no contaminants over the last five years. In well B-4, TCE decreased from 82 to 9.7 ppb; in well B-5, toluene has dropped from a high of 2.4 during this period to below detection; in well P-17, the maximum trans-1,2-DCE level is 1.2 ppb, while TCE has declined from 6.2 to 3.1 ppb; well PW-18 has shown a TCE decline from 12 to 6.6 ppb; and well W-13 has shown cis-1,2-DCE drop from 2.9 to 1.7 during this period and TCE drop from 21 to 16 ppb. Well W-13 in the Prairie du Chien Aquifer and well B-4 in the glacial drift are the two onsite wells showing TCE in excess of the Minnesota MCL/HRL of five ppb. Well PW-18, also in the glacial drift, is the only downgradient offsite well showing TCE slightly in excess of five ppb. The most recent data from May 2007 are provided in Appendix C and the cumulative (historical) analytical data are presented in Appendix D.

Mann-Kendall statistical analyses for PW-17 and PW-18 have shown contaminant concentration trends to be stable or decreasing. Analysis of the past 11 sampling events for PW-17 show a decreasing trend in concentrations of TCE based on comparisons of each sampling event to the ten other data points evaluated in the Mann-Kendall analysis. Analysis of the past 11 sampling events for PW-18 show a decreasing trend in concentrations of TCE based on comparisons of each sampling event to the ten other data points evaluated in the Mann-Kendall analysis. These trend analyses indicate that natural attenuation is reducing the contaminant concentrations at PW-17 and PW-18.

The protectiveness statement from the last five year-review dated May 16, 2003, is as follows:

> "The remedy is protective of human health and the environment. The groundwater extraction system is operational and functional and there are no exposures of concern. The best available information indicated that currently the system adequately protects human health and the environment. Long-term protectiveness will be achieved when groundwater standards have been achieved."

Recommendations and follow-up actions stated in the previous five-year review were as follows:

1. Develop a Close-Out Plan (COP) which will establish criteria through which the remedial action will be shut down. The COP will establish criteria to make the current remedial action more cost-effective to manage in both the short and long-term duration of the remedial action. The COP will also establish criteria which will dictate when it is appropriate to implement a natural attenuation study at the Site.

In September 2003 the Nutting company submitted a Final Close-Out Report (*Barr Engineering 2003*) to the MPCA. The report documented the progress of groundwater monitoring and the groundwater pump-and-treat system from its initial implementation in 1987 through 2004 when the system was shut down. The report, along with historical data, demonstrated that clean up goals required as per the 2003 RAP revised groundwater objectives had been met and that since the discontinuation of the pump-and-treat system, TCE levels have either met or slightly exceeded the MCL/HRL groundwater clean up goal of five ppb TCE at PW-17 and PW-18--the closest off-property downgradient monitoring wells to the Site boundary.

In February 2004 the Nutting Company submitted a Long Term Monitoring Plan (*Barr Engineering, 2004*) which was subsequently revised in June 2004. The monitoring plan outlined sampling procedures and schedules that were to be followed both when the groundwater treatment system was operational and when it was shut down. The monitoring plan also presented a contingency plan to determine when the system should be operating and when it should be disabled. This plan, in combination with the Close-Out Report, satisfied the first recommendation of the 2003 Five-Year Review.

2. The MPCA should update project clean-up levels for the Site based on the Applicable or Relevant and Appropriate Requirements (ARARs) as described by state and federal standards (HRLs and MCLs).

In 2003, an amended RAP was issued modifying groundwater clean-up goals for the Nutting Truck and Caster Site from 50 ppb of TCE to the MCL/HRL action level of five ppb. This is consistent with ARARs associated with groundwater contamination at the Site. This action satisfied the second recommendation of the 2003 five-year review.

3. Institutional controls in the form of a restrictive covenant will be developed to manage residual contamination left onsite.

At the time of this five-year review, ICs, such as a restrictive covenant, have not been finalized or implemented at the Nutting Site. However, a draft Environmental Covenant and Easement document has been prepared by MPCA and issued to the RPs for review and discussion. Recently, the RPs returned the covenant to the MPCA. The completed draft document will be sent to U.S. EPA for its review to ensure it meets the IC criteria that U.S. EPA has established. After U.S. EPA approval, the final covenant will be sent to the Minnesota Attorney General for execution.

4. Because the remedial actions objectives of the RAP have been met and the Site has been operating the pump and treat remedy effectively for over 15 years, the MPCA will delist the Site from the state's PLP. The U.S. EPA will propose to have the Site delisted from the U.S. EPA NPL once groundwater cleanup goals have been met.

The Site has not yet been delisted from the PLP or the NPL. The treatment system has been shut down since 2004 and the revised groundwater clean-up goal for TCE of five ppb as outlined in the 2003 RAP has been achieved at the compliance monitoring wells located downgradient of the property boundary.

The protectiveness of the remedy to human health and the environment has been enhanced by actions taken by the city of Faribault and the MPCA within the past five

years. Previously, the city of Faribault had been using one of its production wells located approximately one mile downgradient of the Nutting Site. A grant from the MPCA in 2004 enabled the city to abandon its downgradient municipal well. This action eliminated the possibility for any TCE-contaminated water from the Site to enter the Faribault public water supply, thereby removing any potential human health risks due to ingestion of contaminated potable water. It should be noted that no contaminants of concern were ever detected in the compliance monitoring wells downgradient of the Nutting Site. Further, there are no private wells in the area and all potable water is supplied by the Faribault municipal water supply. Groundwater treatment to meet the RAP goals at the property boundary and the elimination of possible exposure pathways to contaminated groundwater has eliminated the risk to human health and environment associated with TCE-contaminated groundwater from the Nutting Site. The contaminant levels found in the monitoring wells continue to decrease through natural attenuation.

VI. Five-Year Review Process

Administrative Components

The RP representing Nutting, Shirley and Stewart Shaft, were notified and given the opportunity to contribute to the content of this document. Barr Engineering, Nutting's technical counsel, was also notified of the five-year review and was able to provide comments and information associated with onsite clean-up activities on behalf of the RP.

This document was initially drafted by Delta Consultants on behalf of the MPCA and submitted to the MPCA and U.S. EPA for finalization.

Components associated with this review included:

November 15, 2007:	File review at MPCA
November 29, 2007:	Site inspection to confirm onsite conditions
January 25, 2008:	Submit first draft of this document to MPCA

Community Notification and Involvement

A public notice announcing this five-year review was published in The Faribault Daily News on December 18, 2007. A copy of the notice is included in Appendix A. During the time leading up to and including the 2008 five-year review preparation, no comments or concerns were received from the public concerning the Nutting Truck and Caster Site.

Document Review

All relevant documents associated with this Site were reviewed. A complete list of documents reviewed by the MPCA and U.S. EPA can be found in Appendix B

Data Review

Groundwater analytical data from Annual Monitoring Reports submitted to the MPCA were reviewed and are provided in Appendix C.

Current groundwater analytical data demonstrates evidence of a stable and/or decreasing trend in groundwater contamination. The most recent groundwater data indicates that TCE concentrations exceed MCL/HRL levels in three wells at the Nutting Site: Well B-4 (9.7 ppb), W-13 (16 ppb), and PW-18 (6.6 ppb). Wells B-4 and W-13 are considered to be located within the contamination source area on the Nutting Site. Well PW-18 is located north of the historic Nutting property boundary and was previously utilized as an extraction well in the pump-and-treat system.

The clean-up goal of five ppb for TCE has been achieved at the downgradient compliance monitoring wells. The MPCA and U.S. EPA are confident that the HRL/MCL goal of five ppb for TCE will also be achieved in the onsite wells and the offsite wells closer to the Site (i.e., upgradient of the compliance wells) through natural attenuation, as opposed to the use of the pump-and-treat system or any other active remediation measures. The most recent Tier 2 groundwater sampling results can be found in Appendix C and Figure 5, while the cumulative groundwater analytical data can be found in Appendix D.

Site Inspection

A site inspection was conducted on November, 29 2007, at the Nutting Truck and Caster Site by the U.S. EPA Remedial Project Manager Sheila Sullivan, MPCA Project Leader Gary Krueger, RP Shirley and Stewart Shaft, technical representative for the RP Janet Dalgleish of representing Barr Engineering, and MPCA consultants John Estes and Jacob Knapp of Delta Consultants. The Site inspection included inspections of the monitoring wells, former disposal pit, storm sewer outfall, groundwater treatment system, and the general conditions of the property.

The monitoring wells appeared to be in good condition with no evidence of damage. The disposal pit was capped with a concrete pad that appeared to be in good condition showing no signs of excessive cracking or wear. The location of the storm sewer outfall discharge point was not correctly marked on the Site map available during the Site visit. The location viewed had no evidence of erosion or other functional problems. The actual outfall discharge point is located approximately one block south of the viewed storm sewer discharge point. The location of the outfall point was indicated correctly on the NPDES discharge permit.

The southern portion of the property is enclosed with a fence that had no apparent signs of vandalism, breakage, or other structural problems. The fence and its gates appeared to be in proper working order. The groundwater treatment system is still in place although it is not operating. The system appeared to be in working order should the groundwater pump and treat system be required to be reactivated. The buildings are currently rented as warehouse space, offices, and light industrial uses or vacant. Overall conditions of the Site and its features were satisfactory. The five-year review onsite inspection checklist and photos taken during the inspection are included as Attachments 2 and 3 to this report.

Upon conclusion of the Site inspection there was a detailed discussion regarding progress since the last five-year review. All attendees of the Site inspection were present for the discussion and had opportunity to provide information representing their experiences with the Site since the last five-year review.

Interviews

Interviews were not separately conducted during this five-year review as all interested parties were present during the onsite inspection and the discussion, which immediately followed the inspection. Also present during the discussion was John Mickelson, President of J.B.J Manufacturing which leases a large portion of the Site property. Mr. and Mrs. Shaft indicated that their tenants have never expressed any concerns about the Site. This was confirmed by Mr. Mickelson. There is usually a three to five year turnover of leases. During the public meeting which followed the ATSDR Public Health Consultation for the Nutting Site in 2000, no questions or concerns came up from the public about the Site. There is not a trespassing problem at the Site.

VII. Technical Assessment

Technical Assessment Summary

The technical review section of this five-year review uses the following three questions to evaluate the protectiveness of the selected remedy. Answers to the questions have been based on information obtained through the five-year review process, including; file reviews, site visits, discussions with involved parties and reviewing current and historical data obtained from groundwater monitoring activities.

- **Question A: Is the remedy functioning as intended by the decision documents?**

  Yes, the groundwater pump-and-treat remedy and monitoring well system has functioned as intended by the decision documents. At the time of this five-year review, the treatment system had been shut down as clean-up goals have been met at the compliance wells. While contaminant concentrations in wells within the source area, B-4 and W-13, continue to be above clean-up goals, the monitoring wells PW-17 and PW-18, located 450 feet from the Nutting Company property boundary, have either met current goals or are declining without the need for further active treatment.

  Institutional controls were recommended in the previous 2003 five-year review and have not yet been implemented. An Environmental Covenant and Easement for the groundwater is expected to be in place before the end of the 2008 fiscal year.

- **Question B: Are the exposure assumptions, toxicity data, clean-up levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?**

  Yes, the criteria used at the time to select the remedy are still valid. Toxicity data and clean-up goals used to select the current remedy remain valid. As mentioned, the original clean-up goal of 50 ppb at the time of the 1987 RAP has been revised as per the 2003 RAP. The revised clean-up goal of five ppb for TCE complies with the current regulations and guidelines used by the U.S. EPA, MPCA, and the MDH to determine the safety of drinking water.

Health Risk Limits (HRLs) were first promulgated by Minnesota in 1993/1994 for contaminants that have been found in Minnesota's groundwater as a result of human activity. The MDH compared the 1993/1994 HRLs that were promulgated in the Minnesota Rules to the current U.S. EPA MCLs and found 11 chemicals for which the MCL was lower than the respective HRL values, including TCE. In 2004, the MDH proposed a draft rule recommending revisions to the HRLs. MDH has revised its 2004 draft Health Risk Limit (HRL) Rule based on new U.S. EPA guidance, stakeholder input, and peer review. Effective July 1, 2007, the new chemical-specific HRLs corresponded to their respective MCL values; hence, the HRL for TCE remains at five ppb, but is under review. The HRL values for additional chemicals, including cis-1,2-DCE and vinyl chloride, will be reviewed and included in the 2008 rules revision. Until then, the HRL (and MCL) for vinyl chloride remains at 0.2 ppb, the HRL for cis-1,2-DCE has been 70 ppb as is the MCL, but may be revised in the proposed rule. The HRL for 1,1-DCE, is also under review, but is currently the same as its MCL of seven ppb.

There is no evidence of increased risk of human exposure to contaminated groundwater since the groundwater pump-and-treat remedy has been discontinued. The system still remains onsite should its future use be indicated through monitoring results. Human exposure risk has decreased since the last five-year review due to the abandonment of the nearest downgradient Faribault municipal well #4.

The objectives of the 2003 RAP remain consistent and protective of human health and the environment based on the most recent information regarding the known risks associated with the contaminants of concern at the Nutting Truck and Caster Site.

- **Question C: Has any other information become available that could call into question the protectiveness of the remedy?**

  No, there is no new information that adversely affects the protectiveness of the selected remedy. There is new information that increases the protectiveness of the selected remedy: in 2004 the city of Faribault abandoned and relocated its nearest downgradient municipal well. Abandoning this well has eliminated any potential receptor downgradient of the Nutting Site.

VIII. Issues

The following issues were identified as a result of this five-year review. The issues directly affect the protectiveness of the remedy.

Table 3 – Issues Affecting Protectiveness

Issue ID	Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
1	Institutional controls recommended in the 2003 five-year review need to be implemented. Implementing and maintaining ICs will be required to assure the protectiveness of the remedy.	N	Y
2	Long-term stewardship must be assured, which requires maintaining, monitoring, and certifying ICs at the Site in conjunction with the other Site remedy components.	N	Y

The Long-Term Monitoring Plan presently in place continues to be protective of human health and the environment. Evidence that the TCE concentrations in the contaminant plume are continuing to decrease without the groundwater pump-and-treat system in operation demonstrates that plume stability has been achieved. Contaminant concentrations at the Nutting property boundary are near or below the clean up goals and groundwater analysis demonstrates a trend of decreasing levels of contamination over time.

IX. Recommendations and Follow-up Actions

Table 4 below summarizes the recommendations and follow-up actions for issues affecting the protectiveness of the remedy.

Table 4 - Recommendations and Follow-Up Actions for Issues Affecting Protectiveness

Issue ID	Issues	Recommendations/ Follow-up Actions	Party Responsible	Over-sight Agency	Milestone Date	Affects Protectiveness	
						Current	Future
1	ICs recommended in the 2003 five-year review need to be implemented. Implementing and maintaining ICs will be required to assure the protectiveness of the remedy.	The MPCA, Barr Engineering, and the RP are currently working to develop an effective restrictive covenant that "runs with the land," is not hindered by prior-in-time encumbrances, provides adequate notice to future owners, and will be monitored to ensure its continued existence. The covenant is expected to be in place within six months of the five-year review period.	MPCA	MPCA and U.S. EPA	IC Plan devel. date: March 31, 2009	N	Y

Issue ID	Issues	Recommendations/ Follow-up Actions	Party Responsible	Over-sight Agency	Milestone Date	Affects Protectiveness	
						Current	Future
2	Long-term stewardship must be assured, which requires maintaining, monitoring, and certifying ICs at the Site in conjunction with the other Site remedy components.	An IC Plan will be developed. The Plan will incorporate the results of the evaluation activities and plan for additional IC activities as needed. These activities shall include: evaluating the effectiveness of the restrictive covenant; determining whether additional ICs are needed, and strategizing for long-term stewardship.	MPCA and U.S. EPA	MPCA and U.S. EPA	IC Plan implement. date: Dec. 31, 2009	N	Y

The MPCA recommends that the Nutting Company implement ICs in the form of restrictive covenants to ensure future protectiveness at the Site.

The objectives of the 2003 RAP have been met with the exception of the ICs. Once satisfactory ICs are in place the MPCA will delist the Site from the PLP. Once groundwater cleanup goals have been met, U.S. EPA will propose to have the Site delisted from the NPL.

X. Protectiveness Statements

OU1 - Soil

The first operable unit (OU1) was addressed in 1980 when the contaminated soils and sludge from the onsite seepage pit at the west central area of the property were excavated and replaced with clean fill. This action was performed by the Responsible Party (RP) in response to a Notice of Noncompliance issued by the state. The area was then paved with concrete and is currently used as a loading dock/parking area. The removal of soil and subsequently installed concrete cap eliminated the potential for: 1) precipitation to facilitate the migration of contaminants through the soil; and 2) access to the former seepage pit area by potential receptors. The contamination found in the soils associated with the seepage pit was replaced with soil meeting residential clean-up levels; hence, this portion of the remedy provides long-term protection from contaminants leaching to the aquifer and from human health exposure to any residual TCE that may be in the source area. The remedy selected for OU1 is protective of human health and the environment.

OU2 - Groundwater

The groundwater operable unit (OU2) was addressed by the RP in 1987 under a Consent Order and response Action Plan (RAP) with the MPCA. The RP installed a groundwater extraction and treatment system to contain the groundwater contaminant

plume and to meet contaminant clean-up goals at the Nutting groundwater compliance wells. The compliance wells are located about 900 feet downgradient of the Nutting Site property boundary. The remedy for groundwater currently protects human health and the environment because the groundwater extraction and treatment system has resulted in a significant decline in contaminant concentrations. Since the 2003 five-year review, only TCE remains in the groundwater. The RAP was amended in 2003 to reflect revised TCE clean-up goals which are consistent with the state Health Risk Limit (HRL) for TCE. The concentrations have declined such that the groundwater has achieved clean-up goals at the compliance point, allowing the groundwater extraction and treatment system to be turned off. There are no private wells used for potable water in the area between the Site property and the compliance wells; all commercial and residential properties use the Faribault municipal supply.

The remedy is considered protective in the short-term; however in order for the remedy to be protective in the long-term, institutional controls (ICs) should be implemented to prevent exposure to contaminants until groundwater clean-up goals are achieved throughout the Site. Long-term protectiveness also requires compliance with the groundwater use restrictions. Compliance with effective ICs will be ensured by implementing, monitoring and maintaining effective ICs as well as maintaining the Site remedy components. Long-term stewardship must be ensured to verify compliance with ICs.

Site-wide

The construction was completed for OU1 and OU2 as of September 2003 when the Final Closeout Report was approved by the MPCA. The Site is currently protective of human health and the environment in the short-term. In order for the remedy to be considered protective in the long term, the implementation of ICs will be required at the Site because the TCE levels in onsite groundwater exceed the amended clean-up goals. An Environmental Covenant and Easement is currently being prepared for the Site and will be executed within six months of this report. The MPCA requires this IC for delisting the site from the state Permanent List of Priorities (PLP). Compliance with effective ICs will be ensured by evaluating the effectiveness of the Covenant, determining whether additional ICs are needed, and strategizing for long-term stewardship. Ensuring long-term stewardship requires maintaining, monitoring, and certifying ICs at the Site in conjunction with the other Site remedy components. The MPCA will begin the process of delisting the Nutting Truck and Caster Site from the PLP upon verification that the ICs are in place and effective. The U.S. EPA will propose the Site for National Priority List (NPL) delisting once groundwater cleanup goals have been met.

XI. Next Review

If the Site is delisted from both the state PLP and the federal NPL, the MPCA does not foresee the need for additional review by the U.S. EPA. It is possible that in five years, hazardous substances, pollutants or contaminants will remain at the Site which will not allow for unlimited use with unrestricted exposure. If deemed necessary, the next five-year review is scheduled for completion five years from the date of U.S. EPA approval of this fourth five-year review.

ATTACHMENTS

Attachment 1:

Figures

Figure 1 – Site location map
Figure 2 – Legal description of Site
Figure 3 – Site map with monitoring wells
Figure 4 – Contingency plan flow diagram for groundwater
Figure 5 – Current monitoring well chemical concentrations

Attachment 2:

Site Inspection Checklist

Attachment 3:

Photos Documenting Site Conditions

Attachment 1

Figures

Figure 1 – Site location map

Figure 2 – Legal description of Site

Figure 3 – Site map with monitoring wells

Figure 4 – Contingency plan flow diagram for groundwater

Figure 5 – Current monitoring well chemical concentrations

Site Location

Superfund
U.S. Environmental Protection Agency

Nutting Truck & Caster Co.
Faribault County, Minnesota

EPA ID# MND006154017

State

County

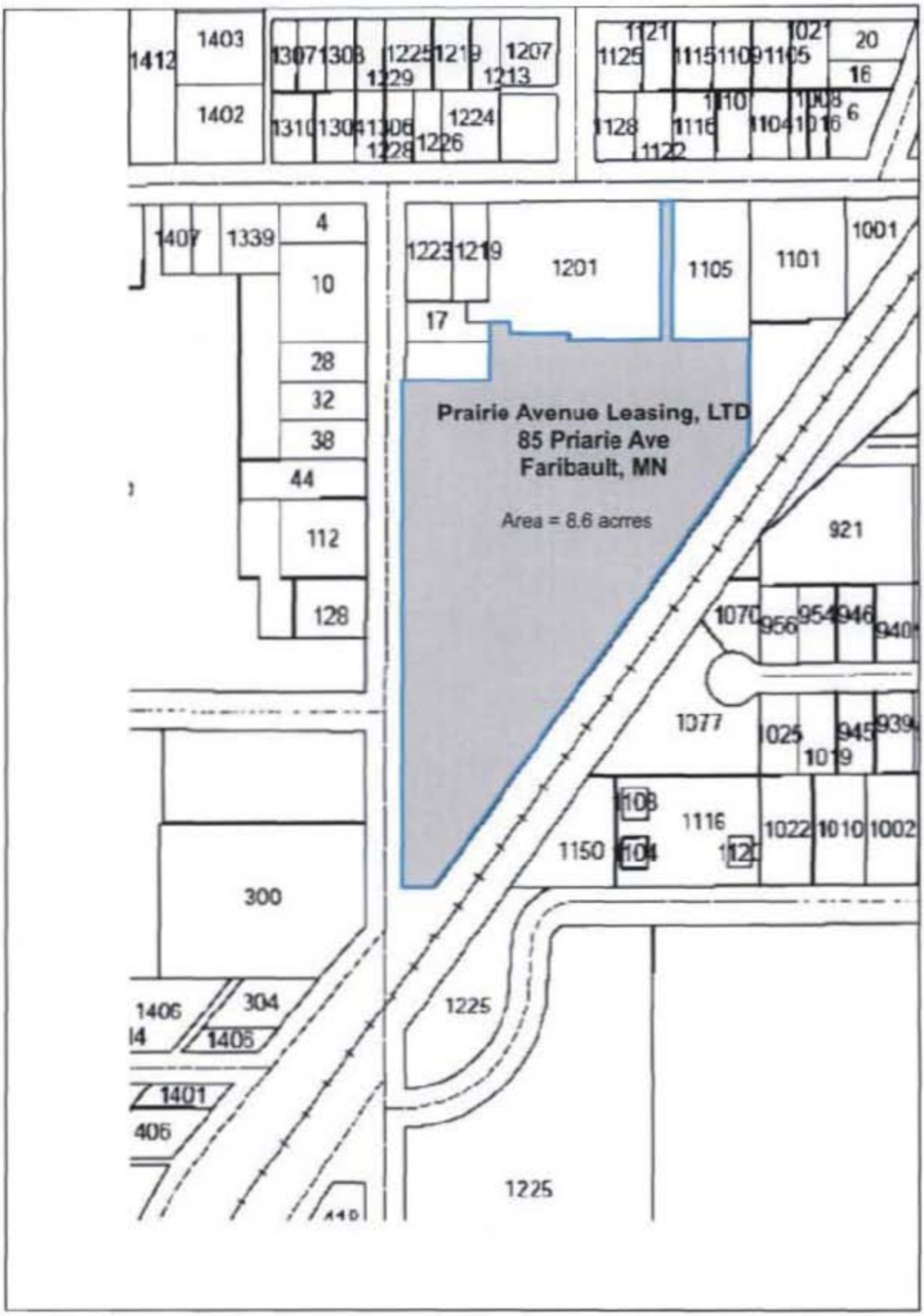
Site

Figure 1

Produced by Julie Schlf
U.S. EPA Region 5 on May 12, 2008
Image Date: 2003

N

GEOS



Property Location Map

Figure 2

Legal Description

36 110 021 AUD PLAT #2
36-110-21 18015 007 MAP # 10
36 16 01 003.000 AUDITORS PLAT #2 L7 &
E20.8FT L10 & L18 THRU L23 & VAC

Imagery Source: 2003 FSA

- Crocker's Creek Outfall Monitoring Point
- Former Disposal Pit
- Nutting Truck Site Outline
- Estimated Capture Zone

Aquifer

- Glacial
- Praire du Chien
- St. Peter Sandstone

Feet
0 700 1,400

Meters
0 100 200 300 400

Figure 3

SITE MAP
Former Nutting Truck and Caster Co.
(Prairie Ave. Leasing Co.)
Faribault, MN

Long Term Monitoring Plan

Contingency Plan Flow Diagram

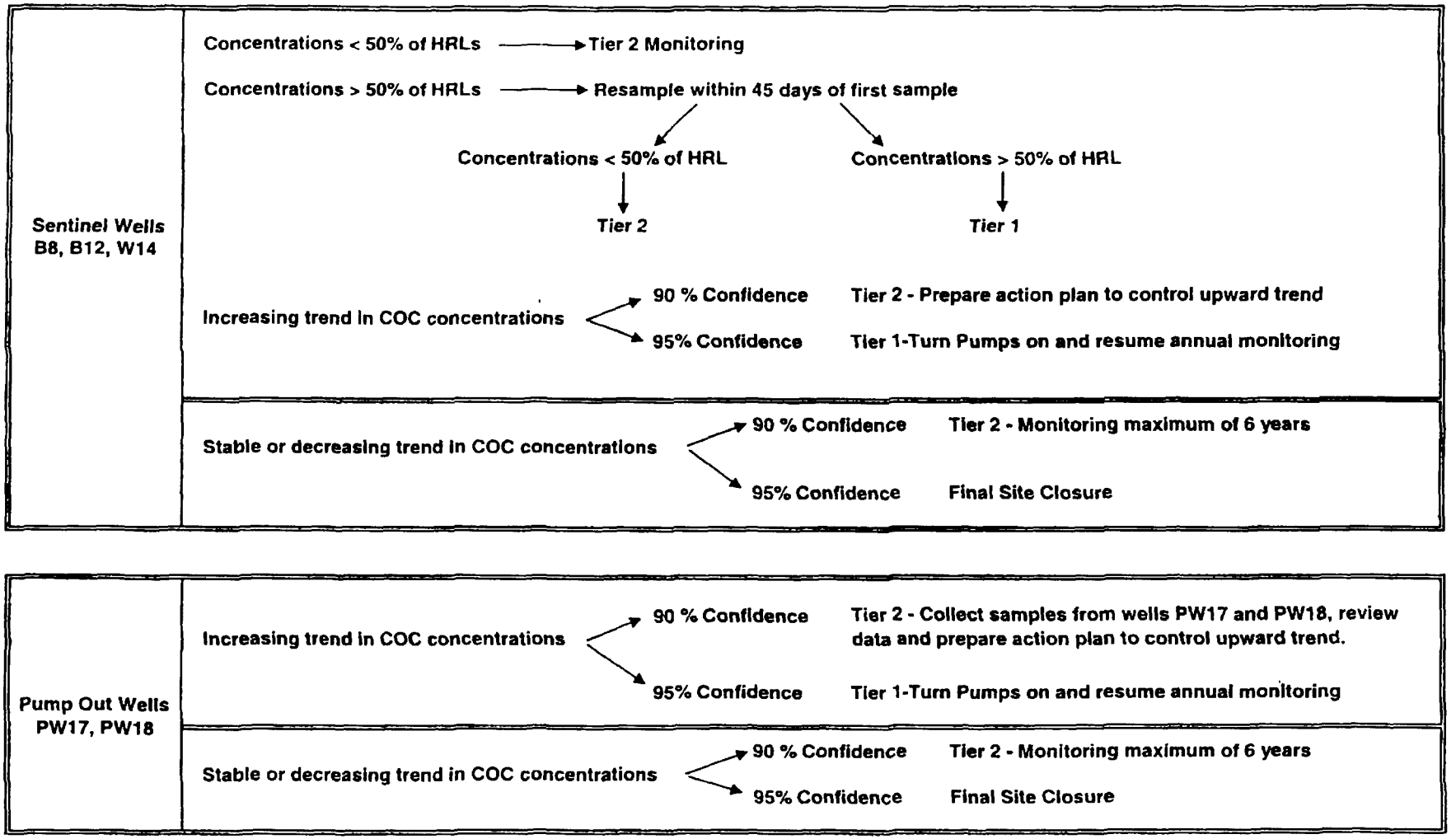


Figure 4

Well Locations Map

Superfund
U.S. Environmental Protection Agency

Nutting Truck & Caster Co.
Rice County, Minnesota

EPA ID# MND006154017

Legend

- Prairie Ave. Leasing/Nutting Truck & Caster Co.
- Moritoring Well Locations

0 500 1,000 Feet

N

Groundwater Data from 5/21/2007
All concentrations in ppb (ug/L)

Where chemical concentrations are not indicated for a well, all concentrations for those chemicals were below 1.0 ppb.

All wells were sampled for:

1,1-Dichloroethylene (1,1-DCE)
cis-1,2-Dichloroethylene (cis1,2 DCE)
trans-1,2-Dichlorethylene (trans1,2-DCE)
Trichloroethylene (TCE)
Vinyl Chloride (VC)

GEOS

RPM: Sheila Sullivan

Figure 5

Produced by Julie Schilf
U.S. EPA Region 5 on May 12, 2008
Image Date: 1998

Attachment 2

Site Inspection Checklist

Please note that "O&M" is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as "system operations" since these sites are not considered to be in the O&M phase while being remediated under the Superfund program.

Five-Year Review Site Inspection Checklist (Template)

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. "N/A" refers to "not applicable.")

I. SITE INFORMATION	
Site name: Nutting Truck and Caster	**Date of inspection:** 11/29/07
Location and Region: Faribault, MN Region V	**EPA ID:** MND006154017
Agency, office, or company leading the five-year review: MPCA	**Weather/temperature:** Clear - Partly sunny - 10°-15°

Remedy Includes: (Check all that apply)

- Landfill cover/containment
- Access controls
- Institutional controls
- Groundwater pump and treatment
- Surface water collection and treatment
- Other _____
- ☒ Monitored natural attenuation
- Groundwater containment
- Vertical barrier walls

Attachments: ~~Inspection team roster attached~~ Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M site manager** _____ _____ _____
   Name Title Date
   Interviewed at site at office by phone Phone no. _____
   Problems, suggestions; Report attached _____

2. **O&M staff** _____ _____ _____
   Name Title Date
   Interviewed at site at office by phone Phone no. _____
   Problems, suggestions; Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency MPCA
Contact Gary Kruger _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; Report attached _____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; Report attached _____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; Report attached _____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; Report attached _____

4. **Other interviews** (optional) Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1.	**O&M Documents**			
	O&M manual	Readily available	Up to date	(N/A)
	As-built drawings	Readily available	Up to date	(N/A)
	Maintenance logs	Readily available	Up to date	(N/A)
	Remarks: Barr engineering provided estimates for annual O&M costs.			
2.	**Site-Specific Health and Safety Plan**	Readily available	Up to date	(N/A)
	Contingency plan/emergency response plan	Readily available	Up to date	(N/A)
	Remarks:			
3.	**O&M and OSHA Training Records**	(Readily available)	(Up to date)	N/A
	Remarks:			
4.	**Permits and Service Agreements**			
	Air discharge permit	Readily available	Up to date	(N/A)
	Effluent discharge	Readily available	Up to date	N/A
	Waste disposal, POTW	Readily available	Up to date	(N/A)
	Other permits	Readily available	Up to date	N/A
	Remarks:			
5.	**Gas Generation Records**	Readily available	Up to date	(N/A)
	Remarks:			
6.	**Settlement Monument Records**	Readily available	Up to date	(N/A)
	Remarks:			
7.	**Groundwater Monitoring Records**	(Readily available)	(Up to date)	N/A
	Remarks:			
8.	**Leachate Extraction Records**	Readily available	Up to date	(N/A)
	Remarks:			
9.	**Discharge Compliance Records**			
	Air	Readily available	Up to date	N/A
	Water (effluent)	(Readily available)	(Up to date)	N/A
	Remarks: System no longer in operation. Discharge records to end of operation complete			
10.	**Daily Access/Security Logs**	Readily available	Up to date	(N/A)
	Remarks:			

IV. O&M COSTS

1. **O&M Organization**

State in-house Contractor for State
PRP in-house (Contractor for PRP)
Federal Facility in-house Contractor for Federal Facility
Other O&M cost estimates provided by contractor

2. **O&M Cost Records**

Readily available Up to date
Funding mechanism/agreement in place
Original O&M cost estimate _____ Breakdown attached

Total annual cost by year for review period if available

From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS (Applicable) N/A

A. Fencing

1. **Fencing damaged** Location shown on site map (Gates secured) N/A

Remarks _____

B. Other Access Restrictions

1. **Signs and other security measures** Location shown on site map N/A

Remarks GW monitoring well locks in place and appear to be in working condition

C. Institutional Controls (ICs)

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented — Yes No (N/A)
Site conditions imply ICs not being fully enforced — Yes No (N/A)

Type of monitoring (*e.g.*, self-reporting, drive by) _____
Frequency _____
Responsible party/agency _____
Contact _____ (Name) _____ (Title) _____ (Date) _____ (Phone no.)

Reporting is up-to-date — Yes No (N/A)
Reports are verified by the lead agency — Yes No (N/A)

Specific requirements in deed or decision documents have been met — Yes No (N/A)
Violations have been reported — Yes No (N/A)
Other problems or suggestions: Report attached
Institutional controls are drafted but not in place at the time of the site visit.

2. **Adequacy** ICs are adequate ICs are inadequate (N/A)
Remarks _____

D. General

1. **Vandalism/trespassing** Location shown on site map (No vandalism evident)
Remarks _____

2. **Land use changes on site** (N/A)
Remarks _____

3. **Land use changes off site** (N/A)
Remarks _____

VI. GENERAL SITE CONDITIONS

A. Roads Applicable N/A

1. **Roads damaged** Location shown on site map Roads adequate (N/A)
Remarks _____

B. Other Site Conditions

Remarks_____

_____

_____

_____

_____

_____

VII. LANDFILL COVERS Applicable (N/A)

A. Landfill Surface

1. **Settlement** (Low spots) Location shown on site map Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Cracks** Location shown on site map Cracking not evident
   Lengths_____ Widths_____ Depths_____
   Remarks_____
   _____

3. **Erosion** Location shown on site map Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

4. **Holes** Location shown on site map Holes not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

5. **Vegetative Cover** Grass Cover properly established No signs of stress
   Trees/Shrubs (indicate size and locations on a diagram)
   Remarks_____
   _____

6. **Alternative Cover (armored rock, concrete, etc.)** N/A
   Remarks_____
   _____

7. **Bulges** Location shown on site map Bulges not evident
   Areal extent_____ Height_____
   Remarks_____
   _____

8. **Wet Areas/Water Damage** — Wet areas/water damage not evident
   - Wet areas — Location shown on site map — Areal extent_____
   - Ponding — Location shown on site map — Areal extent_____
   - Seeps — Location shown on site map — Areal extent_____
   - Soft subgrade — Location shown on site map — Areal extent_____

   Remarks_____

9. **Slope Instability** — Slides — Location shown on site map — No evidence of slope instability
   Areal extent_____
   Remarks_____

B. Benches — Applicable — (N/A)

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** — Location shown on site map — N/A or okay
   Remarks_____

2. **Bench Breached** — Location shown on site map — N/A or okay
   Remarks_____

3. **Bench Overtopped** — Location shown on site map — N/A or okay
   Remarks_____

C. Letdown Channels — Applicable — (N/A)

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** — Location shown on site map — No evidence of settlement
   Areal extent_____ Depth_____
   Remarks_____

2. **Material Degradation** — Location shown on site map — No evidence of degradation
   Material type_____ Areal extent_____
   Remarks_____

3. **Erosion** — Location shown on site map — No evidence of erosion
   Areal extent_____ Depth_____
   Remarks_____

4. **Undercutting** Location shown on site map No evidence of undercutting
Areal extent_____ Depth_____
Remarks_____

5. **Obstructions** Type_____ No obstructions
Location shown on site map Areal extent_____
Size_____
Remarks_____

6. **Excessive Vegetative Growth** Type_____
No evidence of excessive growth
Vegetation in channels does not obstruct flow
Location shown on site map Areal extent_____
Remarks_____

D. Cover Penetrations Applicable (N/A)

1. **Gas Vents** Active Passive
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance
N/A
Remarks_____

2. **Gas Monitoring Probes**
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

3. **Monitoring Wells** (within surface area of landfill)
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

4. **Leachate Extraction Wells**
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

5. **Settlement Monuments** Located Routinely surveyed N/A
Remarks_____

E. Gas Collection and Treatment Applicable (N/A)

1. **Gas Treatment Facilities**
   Flaring Thermal destruction Collection for reuse
   Good condition Needs Maintenance
   Remarks_____

2. **Gas Collection Wells, Manifolds and Piping**
   Good condition Needs Maintenance
   Remarks_____

3. **Gas Monitoring Facilities** (*e.g.*, gas monitoring of adjacent homes or buildings)
   Good condition Needs Maintenance N/A
   Remarks_____

F. Cover Drainage Layer Applicable (N/A)

1. **Outlet Pipes Inspected** Functioning N/A
   Remarks_____

2. **Outlet Rock Inspected** Functioning N/A
   Remarks_____

G. Detention/Sedimentation Ponds Applicable (N/A)

1. **Siltation** Areal extent_____ Depth_____ N/A
   Siltation not evident
   Remarks_____

2. **Erosion** Areal extent_____ Depth_____
   Erosion not evident
   Remarks_____

3. **Outlet Works** Functioning N/A
   Remarks_____

4. **Dam** Functioning N/A
   Remarks_____

H. Retaining Walls Applicable (N/A)

1. **Deformations** Location shown on site map Deformation not evident
   Horizontal displacement_____ Vertical displacement_____
   Rotational displacement_____
   Remarks_____

2. **Degradation** Location shown on site map Degradation not evident
   Remarks_____

I. Perimeter Ditches/Off-Site Discharge (Applicable) N/A

1. **Siltation** (Location shown on site map) (Siltation not evident)
   Areal extent_____ Depth_____
   Remarks_____

2. **Vegetative Growth** Location shown on site map N/A
   (Vegetation does not impede flow)
   Areal extent_____ Type_____
   Remarks_____

3. **Erosion** Location shown on site map (Erosion not evident)
   Areal extent_____ Depth_____
   Remarks_____

4. **Discharge Structure** Functioning (N/A)
   Remarks Treatment system not in operation since 2004

VIII. VERTICAL BARRIER WALLS Applicable (N/A)

1. **Settlement** Location shown on site map Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____

2. **Performance Monitoring** Type of monitoring_____
   Performance not monitored
   Frequency_____ Evidence of breaching
   Head differential_____
   Remarks_____

IX. GROUNDWATER/SURFACE WATER REMEDIES (Applicable) N/A

A. Groundwater Extraction Wells, Pumps, and Pipelines — Applicable (N/A)

1. **Pumps, Wellhead Plumbing, and Electrical**
   Good condition All required wells properly operating Needs Maintenance (N/A) 2004
   Remarks extracting and treatment not in operation since 2003

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   Good condition Needs Maintenance
   Remarks

3. **Spare Parts and Equipment**
   Readily available Good condition Requires upgrade Needs to be provided
   Remarks

B. Surface Water Collection Structures, Pumps, and Pipelines — Applicable (N/A)

1. **Collection Structures, Pumps, and Electrical**
   Good condition Needs Maintenance
   Remarks

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   Good condition Needs Maintenance
   Remarks

3. **Spare Parts and Equipment**
   Readily available Good condition Requires upgrade Needs to be provided
   Remarks

C. Treatment System Applicable (N/A)

1. **Treatment Train** (Check components that apply)
   Metals removal Oil/water separation Bioremediation
   Air stripping Carbon adsorbers
   Filters_____
   Additive (*e.g.*, chelation agent, flocculent)_____
   Others_____
   Good condition Needs Maintenance
   Sampling ports properly marked and functional
   Sampling/maintenance log displayed and up to date
   Equipment properly identified
   Quantity of groundwater treated annually_____
   Quantity of surface water treated annually_____
   Remarks Treatment system not in operation since 2003

2. **Electrical Enclosures and Panels** (properly rated and functional)
   (N/A) Good condition Needs Maintenance
   Remarks_____

3. **Tanks, Vaults, Storage Vessels**
   (N/A) Good condition Proper secondary containment Needs Maintenance
   Remarks_____

4. **Discharge Structure and Appurtenances**
   (N/A) Good condition Needs Maintenance
   Remarks_____

5. **Treatment Building(s)**
   (N/A) Good condition (esp. roof and doorways) Needs repair
   Chemicals and equipment properly stored
   Remarks_____

6. **Monitoring Wells** (pump and treatment remedy)
   (Properly secured/locked) (Functioning) (Routinely sampled) (Good condition)
   (All required wells located) Needs Maintenance N/A
   Remarks_____

D. Monitoring Data

1. Monitoring Data
   (Is routinely submitted on time) (Is of acceptable quality)

2. Monitoring data suggests:
   (Groundwater plume is effectively contained) (Contaminant concentrations are declining)

D. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

(Properly secured/locked) (Functioning) (Routinely sampled) (Good condition)
(All required wells located) Needs Maintenance N/A

Remarks_____

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

C.	**Early Indicators of Potential Remedy Problems**
	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

D.	**Opportunities for Optimization**
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

Attachment 3

Photos Documenting Site Conditions

Nutting Truck and Caster
Five-Year Review Inspection Photographs

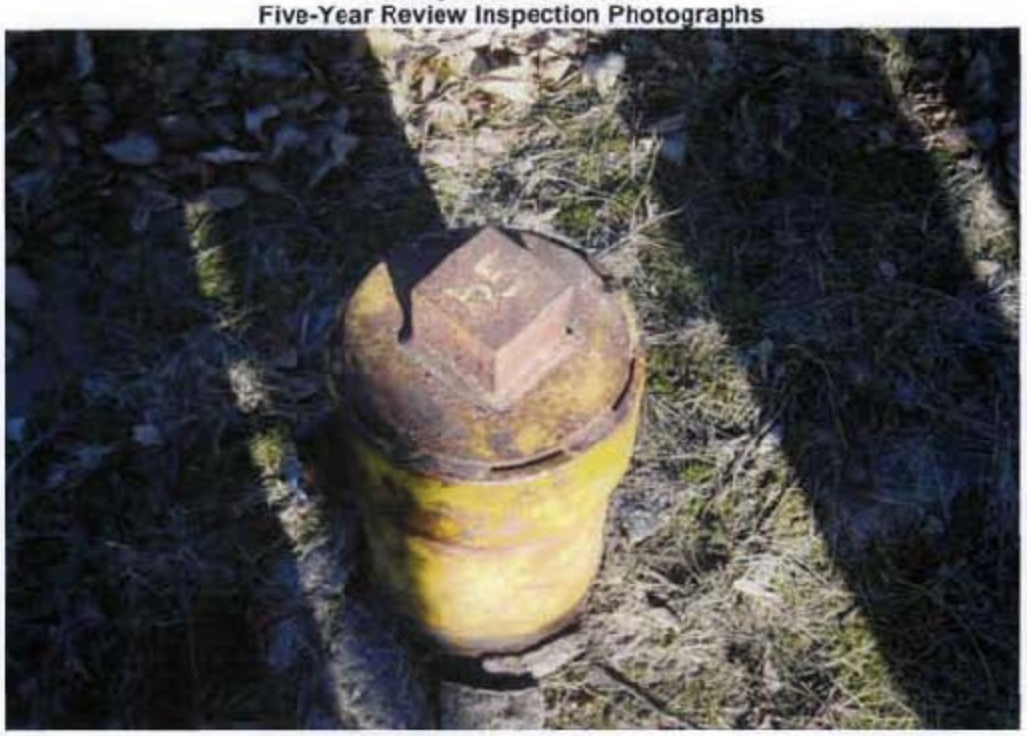


Photo ID	Description: Well B-5	Direction
1	Date: 11/29/07	NA

Photo ID	Description: Well B-5	Direction
2	Date: 11/29/07	NA

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Site looking North East From B-5	Direction
3	**Date: 11/29/07**	NE

Photo ID	Description: Site Looking North From B-5	Direction
4	**Date: 11/29/07**	N

Photo ID	Description: Former Disposal Pit Area	Direction
5	**Date: 11/29/07**	N

Photo ID	Description: WellsB-4 and W-13	Direction
6	**Date: 11/29/07**	S

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Well B-4	Direction
7	**Date: 11/29/07**	NA

Photo ID	Description: Well W-13	Direction
8	**Date: 11/29/07**	NA

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Wells B-4 and W-13	Direction
9	**Date: 11/29/07**	N

Photo ID	Description: Groundwater Treatment System Electric Control Box and PW-17	Direction
10	**Date: 11/29/07**	N

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	**Description:** PW-18 and Box Containing Groundwater Treatment System	Direction
11	**Date: 11/29/07**	N

Photo ID	**Description:** Box Containing Groundwater Treatment System and PW-18	Direction
12	**Date: 11/09/07**	NE

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Monitoring Wells, Groundwater Treatment System Electric Control Box and Box Containing Cascade System	Direction
13	**Date: 11/29/07**	E

Photo ID	Description: Groundwater Treatment System Electric Control Box	Direction
14	**Date: 11/29/07**	E

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Wells PW-17 and PW-18	Direction
15	**Date: 11/29/07**	W

Photo ID	Description: Storm Sewer and Groundwater Treatment System	Direction
16	**Date: 11/29/07**	W

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Wells W-14 and B-12	Direction
18	**Date: 11/29/07**	E

Photo ID	Description: Wells W-14, B-12 and B-8	Direction
19	**Date: 11/29/07**	E

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Wells W-14, B-12 and B-8	Direction
20	**Date: 11/29/07**	N

Photo ID	Description: Vegetation Around Wells W-14, B-12 and B-8	Direction
21	**Date: 11/29/07**	E

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	**Description:** Wells B-8 and W-14. B-12 Hidden By Vegetation	Direction
22	**Date: 11/29/07**	W

Photo ID	**Description:** Crockers Creek	Direction
23	**Date: 11/29/07**	S

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	**Description**: Suspected Crockers Creek Discharge Point	Direction
24	**Date: 11/29/07**	SE

Photo ID	**Description**: Suspected Crockers Creek Discharge Point	Direction
25	**Date: 11/29/07**	S

Nutting Truck and Caster
Five-Year Review Inspection Photographs

Photo ID	Description: Crockers Creek	Direction
26	**Date: 11/29/07**	S

Photo ID	Description: Suspected Crockers Creek Discharge Point	Direction
27	**Date: 11/29/07**	S

APPENDICES

APPENDIX A

(Public Notice Documentation)

Announcement of a Five-Year Review
for the
Nutting Truck and Caster Company Superfund Site

The Minnesota Pollution Control Agency (MPCA) is beginning a fourth Five-year Review of the Nutting Truck and Caster Company Superfund site. Superfund law requires a review of sites where the cleanup is in progress or cleanup is completed with hazardous waste being managed on site. Five-year Reviews ensure that cleanup efforts protect human health and the environment. The United States Environmental Protection Agency (EPA) is participating in the Five-year Review.

The site was formerly a manufacturing and distribution facility for casters, wheels, hand trucks, and towline trucks. In 1984 the Nutting Company relocated its manufacturing facility to South Dakota. The property is now leased for commercial and light industrial purposes.

In 1983 the Nutting Truck and Caster Company site was placed on the EPA's National Priorities List (NPL) making it eligible for investigation and cleanup under the Superfund program. In 1979 the Nutting Company removed the contaminant source area, back filled the area with clean fill, and capped the area with concrete. A network of monitoring wells has been in place since that time. In 1992 The Nutting Company constructed and installed a groundwater extraction and treatment system to prevent migration of groundwater from the site. Upon meeting sustained treatment goals in 2003 the extraction system was disconnected. Groundwater monitoring has been completed on a semiannual basis from six monitoring wells and two extraction wells since 1987.

The purpose of the Five-year review is to ensure cleanup efforts continue to protect human health and the environment. This five year review will also evaluate whether cleanup goals outlined in the sites Remedial Action Plan (RAP) remain protective of human health and the environment.

In the Most recent Five-year Review conducted in 2003 the MPCA found that remedial actions at the site remained protective of human health and the environment. The MPCA concluded that long term protectiveness will be achieved when groundwater cleanup standards are met and institutional controls are in place.

No formal meeting or public comment period is required for this review. The MPCA invites public opinion and comments. Comments should be submitted no later than December 31st, 2007 and be directed to the site Project Manager listed below. Local citizens are encouraged to participate by bringing information or any concerns related to this site or requests for more information to the attention of:

Mr. Gary Krueger
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155

The sites EPA fact sheet is located at; www.epa.gov/region5/superfund/npl/minnesota/index.html. Site documents are available for review at the St. Paul MPCA office, 520 Lafayette Road North, St. Paul, MN 55155. These documents will provide more detail on site cleanup history and remedies in place.

STATE OF MINNESOTA
COUNTY OF RICE

FARIBAULT DAILY NEWS

DELTA CONSULTANTS
5910 RICE CREEK PARKWAY STE 100
SHOREVIEW MN 55126

REFERENCE: 22297
393371 5 YEAR REVIEW

I do solemnly swear that a copy of the notice, as per the clipping attached, was published in the regular and entire edition of the Faribault Daily News, a newspaper of general circulation, published in Faribault, County of Rice, State of Minnesota and not in any supplement. The newspaper has complied with all the requirements constituting qualifications as a legal newspaper, as prided by Minnesota statute 331A.02, 331A.07 and all other applicable laws, as amended. The attached advertisement appeared in the issues listed below.

Authorized Agent Debra Albright

Sworn to before me this 18th day of Dec 2007

Melissa L. Tutewohl
Notary Public, Rice County, Minnesota

PUBLISHED ON: 12/18

MELISSA L. TUTEWOHL
NOTARY PUBLIC-MINNESOTA
My Commission Expires Jan. 31, 2010

TOTAL COST: 122.88
FILED ON: 12/18/07

Lowest classified rate: $16.25
Maximum rate allowed by law: $10.25

Announcement of a Five-Year Review for the Nutting Truck and Caster Company Superfund Site

The Minnesota Pollution Control Agency (MPCA) is beginning a fourth Five-year Review of the Nutting Truck and Caster Company Superfund site located in Faribault, MN. Superfund law requires a review of sites where the cleanup is in progress or cleanup is completed with hazardous waste being managed on site. Five-year Reviews ensure that cleanup efforts protect human health and the environment. The United States Environmental Protection Agency (EPA) is participating in the Five-year Review.

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Mr. Gary Krueger
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155

The sites EPA fact sheet is located at www.epa.gov/region5/superfund/npl

APPENDIX B

List of Documents Reviewed

Documents Reviewed
Fourth Five-Year Review
Nutting Truck and Caster

Five-Year Review Report
MPCA May 16, 2003

Final Close Out Report
Barr Engineering July 25, 2003

Long Term Monitoring Plan
Barr Engineering February 2004

Long Term Monitoring Plan
Barr Engineering June 2004

NPL Fact Sheet
U.S EPA Region 5 www.epa.gov/R5Super/npl/minnesota/MND006154017.htm

Second Quarter 2007 Tier 2 Monitoring Report
Barr Engineering

Cumulative Analytical Data
Barr Engineering, no associated report

Approval of the August 2005 Update of the Minnesota Environmental Response and Liability Act-State Superfund Priority List
MPCA Office Memorandum September 9, 2005

Delisting of the Faribault Municipal Well Superfund Site, SR77
MPCA Office Memorandum, June 17, 2005

State of Minnesota Grant Contract for City Well No.4 Replacement
MPCA June 21, 2004

Letter to: William E. Muno, Division Director-Superfund U.S. EPA Region 5.
From: Gary A. Pulford, Manager-Superfund Section MPCA.
June 17,2003

Letter to: Gladys Beard, Thomas Kenny, Mark Rys
From John J. O'Grady, Remedial Project Manager U.S. EPA.
April 15, 2003
Faxed to Gary Krueger, MPCA. June 6, 2006
From Sheila Sullivan, U.S. EPA

NPDES Discharge Permit
MPCA September 8, 2000

NPDES Discharge Monitoring Reports
Barr Engineering, January 28, 2005
January 20, 2004
January 24, 2003
Amended report
February 24, 2003

APPENDIX C

(May 2007 Analytical Data-Monitoring Report)

BARR

Barr Engineering Company
4700 West 77th Street • Minneapolis, MN 55435-4803
Phone: 952-832-2600 • Fax: 952-832-2601 • www.barr.com

An EEO Employer

Minneapolis, MN • Hibbing, MN • Duluth, MN • Ann Arbor, MI • Jefferson City, MO

August 21, 2007

Mr. Gary Krueger
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155

Re: Former Nutting Truck and Caster Company Site
Faribault, Minnesota

Dear Mr. Krueger:

The attached Second Quarter 2007 Tier 2 Monitoring Report for the Former Nutting Truck and Caster Company Site (Site) was prepared on behalf of Prairie Avenue Leasing, Ltd. The samples were collected and analyzed as required by the Long-Term Monitoring Plan (Barr, 2003) and the Final Close Out Report (Barr, 2003) for the Site.

Water quality concentrations in samples from the former groundwater extraction wells PW17 and PW18 have remained stable or decreased slightly over the past three years since the pumps were removed. Trichloroethylene (TCE) was detected at concentrations of 9.7 ug/L and 16 ug/L in source wells B4 and W13, and 3.2 ug/L and 6.6 ug/L in former extraction wells PW17 and PW18. No VOCs have been detected in samples from downgradient sentinel wells B8, B12 and W14.

The groundwater quality is stable and TCE concentrations in the source wells and pumpout wells are near the Health Risk Limit and the Maximum Contaminant Limit. Given the long history of decreasing or stable concentrations in samples from the source wells and former pump-out wells and the fact that TCE has never been detected in the sentinel wells, continued monitoring is no longer needed to demonstrate that the plume is stable.

This site is ready for closure and delisting. Barr requests that MPCA and U.S. EPA consider discontinuing groundwater monitoring and close the Nutting Truck and Caster Company file. Following Site closure, the Site should be removed from the U.S. EPA National Priorities List and Minnesota's Permanent List of Priorities. I would like to discuss site closure with you at your earliest convenience.

Please contact me at 612-626-7095 if you have any questions or comments regarding this request. Your timely response will be greatly appreciated.

Sincerely,

Marta Nelson for:
Janet Dalgleish

c: Stewart Shaft
Mark Kaster

Second Quarter 2007 Tier 2 Monitoring Report
Former Nutting Truck and Caster Company Site

Nutting Truck and Caster Site **Monitoring Period: Second Quarter 2007**
Tier 2 Groundwater Monitoring Program **Date: May 21, 2007**

Sample Collection and Analysis Completeness: 100%

Samples were collected from wells B4, B5, B8, B12, W13, W14, PW17, and PW18 and analyzed by Legend Technical Services for trichloroethylene, 1,1-dichlorothylene, cis-1,2-dichlorothylene, and trans-1,2-dichlorothylene and vinyl chloride.

Contingency Plan Criteria Elements

Sentinel Wells B8, B12, W14

COC concentrations are less than detection limit: Yes

Wells PW17 and PW18

TCE concentration trend is stable or decreasing: Yes, see Figures 3A and 3B

Quality Assurance Review (See Laboratory Report for Details):

Holding Time: All holding times were met by Legend Technical Services.
Duplicates: PW17, Relative Percent Difference was less than 10% for detected compounds. Duplicate results are included on Table 2.
Blanks: All parameters were reported as less than the detection limit in the trip, field and method blanks.
Surrogate Recovery: Met QA/QC requirements.
Matrix Spike Duplicate Recovery: Met QA/QC requirements.

List of Tables:	**Table 1 Groundwater Elevations** **Table 2 Water Quality Data**
List of Figures:	**Figure 1 Site Map** **Figure 2 Groundwater Elevations** **Figures 3A and 3B Mann Kendall Test Analysis**
Attachments	**Attachment A Field Data Report** **Attachment B Laboratory Data Report**

Report was prepared by:

Marta Nelson for: **Janet B. Dalgleish PG No. 30407**	**Date: August 20, 2007**

Tables

Table 1
Tier 2 Monitoring Results
Groundwater Elevation Data
1996-2006

(elevations in ft./MSL)

Location	B4	B5	B8	B12	W13	W14	PW17	PW18
11/25/1987	974.44	--	972.37	972.06	974.83	973.51	972.38	972.41
12/03/1987	973.89	--	972.77	970.73	974.19	971.97	946.96	971.03
12/11/1987	974.83	--	972.66	971.86	975.15	972.90	933.59	971.14
12/21/1987	973.82	--	972.64	970.72	974.16	971.88	933.59	971.58
01/13/1988	973.71	--	972.64	970.62	974.03	971.85	940.38	971.56
02/04/1988	973.64	--	972.62	970.59	973.98	971.82	938.41	971.68
03/21/1988	974.16	--	972.86	970.89	974.36	972.10	933.29	972.17
05/18/1988	974.03	--	972.04	971.79	974.33	972.16	933.28	972.34
07/27/1988	973.58	--	971.45	971.35	973.74	971.61	942.56	972.02
09/01/1988	973.27	--	971.23	970.97	973.53	971.30	949.86	962.17
11/18/1988	973.14	--	971.15	970.93	973.35	971.27	951.68	961.94
04/07/1989	--	--	--	--	--	--	945.35	964.95
05/15/1989	973.46	--	971.51	971.30	973.65	971.63	950.04	965.89
08/16/1989	972.81	--	--	--	973.0	--	951.68	964.98
10/23/1989	972.54	--	970.45	970.50	972.76	970.86	947.09	964.49
01/02/1990	--	--	--	--	972.54	--	937.61	965.04
05/08/1990	972.55	--	970.66	970.76	972.76	970.89	950.17	962.97
08/20/1990	--	--	--	--	--	--	933.39	961.99
12/11/1990	973.15	--	971.02	971.11	973.40	971.42	932.99	959.76
03/11/1991	--	--	--	--	973.08	--	933.31	961.81
06/18/1991	974.63	--	972.67	972.47	974.85	972.79	933.53	--
09/10/1991	--	--	--	--	--	--	946.68	960.22
11/21/1991	974.09	--	972.11	971.87	974.43	972.22	943.93	962.04
06/11/1992	974.86	--	972.75	972.50	975.20	972.85	949.69	967.75
09/22/1992	--	--	--	--	--	--	955.49	965.84
11/24/1992	974.75	--	--	--	975.15	--	948.14	965.00
03/29/1993	--	--	--	--	--	--	961.48	965.09
07/14/1993	976.74	--	974.51	974.24	977.13	974.63	964.16	966.60
09/08/1993	--	--	--	--	--	--	974.28	970.89
11/11/1993	975.68	--	--	--	976.15	--	966.19	966.39
05/12/1994	975.41	978.84	973.13	972.86	975.80	973.24	973.44	966.51
10/25/1994	975.60	--	--	--	975.96	--	968.19	967.04
05/24/1995	975.03	978.34	972.73	972.50	975.39	972.86	967.87	963.09
09/25/1995	974.63	--	--	--	975.07	--	962.47	966.44
08/02/1996	975.30	978.34	972.58	972.36	975.35	972.70	969.02	962.29
11/20/1996	974.49	--	--	--	974.74	--	952.89	961.59
05/30/1997	974.58	--	972.42	972.16	975.00	972.54	950.75	965.39
11/26/1997	974.94	--	--	--	975.44	--	950.84	966.39
06/02/1999	975.51	978.90	973.38	973.12	975.95	973.50	958.19	963.59
05/02/2000	974.16	977.45	972.10	969.82	974.61	972.19	964.63	961.66
03/21/2001	973.75	976.84	971.76	971.52	974.15	971.88	966.74	961.61
05/08/2002	973.84	976.97	971.78	971.56	974.27	971.93	955.92	961.59
04/17/2003	973.48	976.36	971.50	971.25	973.84	971.60	966.41	972.03
05/12/2004	973.12	975.72	971.24	970.96	973.69	971.33	955.99	961.91
12/02/2004	974.10	976.99	972.08	971.84	974.39	972.17	972.78	972.75
05/10/2005	974.09	976.78	971.99	971.72	974.36	972.08	972.71	972.68
10/25/2005	974.84	977.9	972.58	972.33	975.1	972.68	973.38	973.35
5/24/2006	975.07	978.12	972.82	972.54	975.38	972.91	973.59	973.56
10/23/2006	974.03	977.07	971.93	971.68	974.34	972.02	972.65	972.6
5/21/2007	974.14	977.20	972.01	971.74	974.46	972.08	972.74	972.71

-- Not measured.

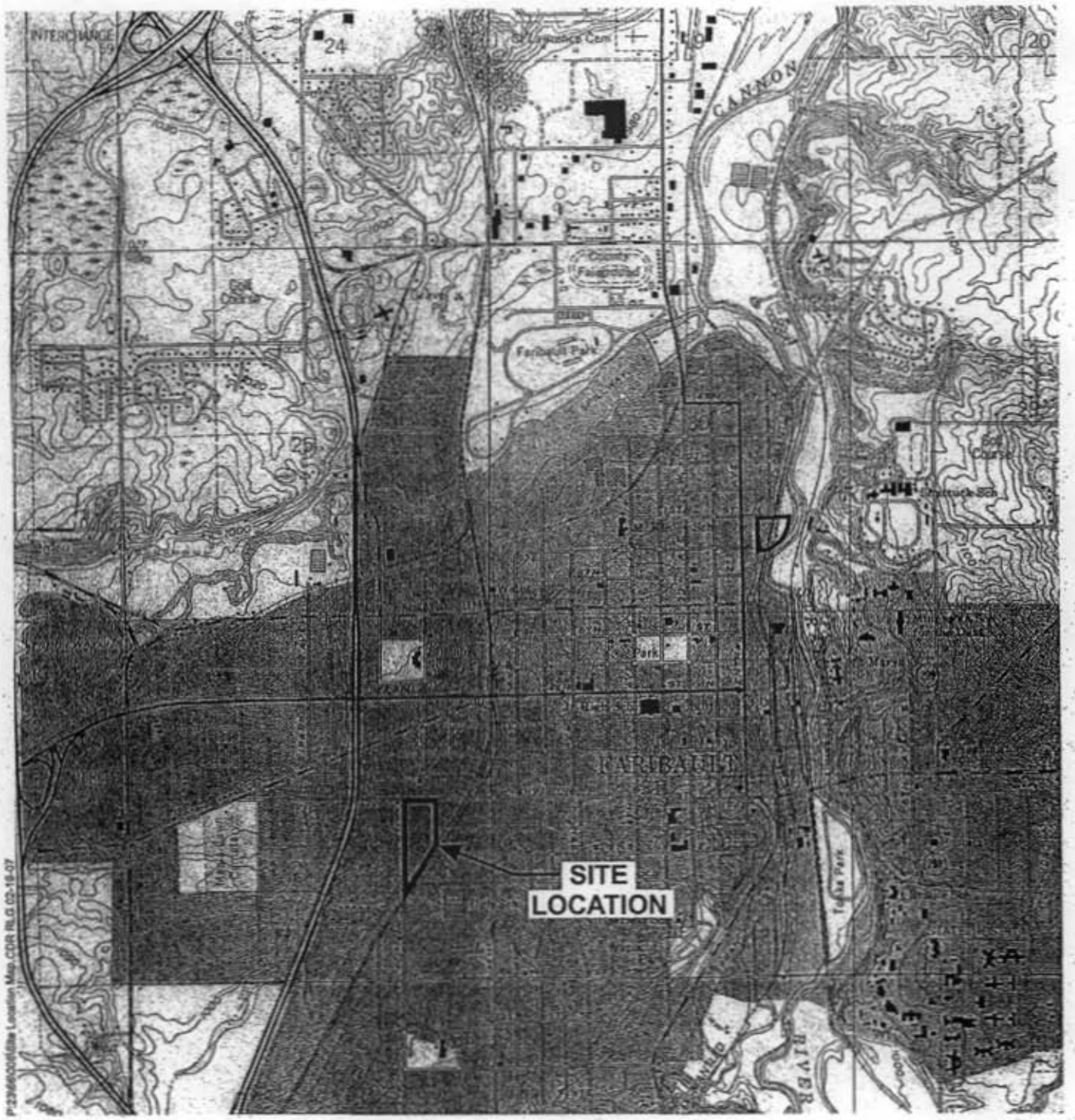
8/20/2007 4:19 PM
P:\23\66\006\LIMS\35_H2OEL_Oct2006.xls

Table 2
Tier 2 Monitoring Results
Selected Volatile Organic Compounds
2nd Quarter 2007

(concentrations in ug/L)

Location	B4	B5	B8	B12	W13	W14	PW17	PW17	PW18
Date	5/21/2007	5/21/2007	5/21/2007	5/21/2007	5/21/2007	5/21/2007	5/21/2007	5/21/2007	5/21/2007
Lab	Legend	Legend	Legend	Legend	Legend	Legend	Legend	Legend	Legend
Dup								DUP	
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethylene, cis	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	1.2	1.1	<1.0
1,2-Dichloroethylene, trans	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	9.7	<1.0	<1.0	<1.0	16	<1.0	3.2	3.1	6.6
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Figures



Source: USGS 7.5' Quadrangle, Faribault, MN 1991

QUADRANGLE LOCATION

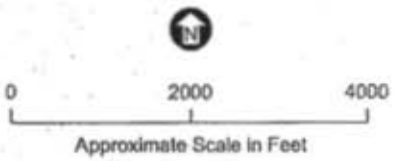
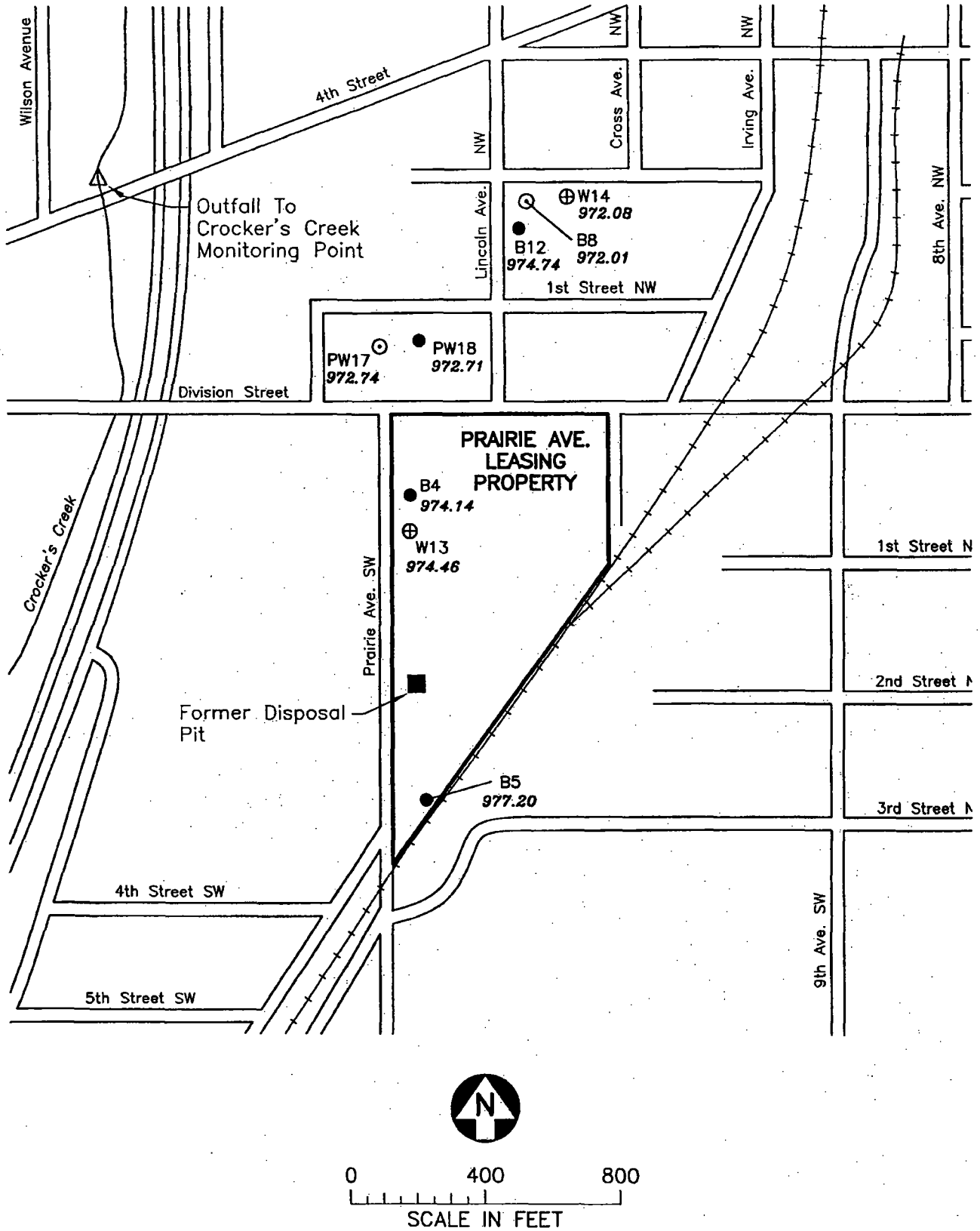


Figure 1

SITE LOCATION MAP
Prairie Avenue Leasing
Faribault, Minnesota



RLG M:\CAD\2366006\27136_1.DWG Plot at 1 08/14/2007 09:39:45

Monitoring Wells

- ● Glacial Drift Aquifer
- ⊙ St. Peter Sandstone Aquifer
- ⊕ Praire du Chien Aquifer

Figure 2

GROUNDWATER ELEVATIONS
MAY 2007
Nutting Truck and Caster Site
Faribault, Minnesota

Figure 3A
MANN-KENDALL STATISTICAL ANALYSIS
PW-17 Trichloroethene

Trichloroethene Concentrations

Date	06/02/1999	05/02/2000	03/21/2001	05/08/2002	04/17/2003	05/12/2004	12/02/2004	05/10/2005	10/25/2005	05/24/2006	10/23/2006	05/21/2007	
Sampling Event	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Event 11	Event 12	
Trichloroethene Concentrations	4.9	4	4	3.3	6.2	2.6	3.5	3	3.2	3.3	3.1	3.2	**Sum of Rows**
Compare to Event 1		1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-7
Compare to Event 2			0	-1	1	-1	-1	-1	-1	-1	-1	-1	-7
Compare to Event 3				-1	1	-1	-1	-1	-1	-1	-1	-1	-7
Compare to Event 4					1	-1	1	-1	-1	0	-1	-1	-3
Compare to Event 5						-1	-1	-1	-1	-1	-1	-1	-7
Compare to Event 6							1	1	1	1	1	1	6
Compare to Event 7								-1	-1	-1	-1	-1	-5
Compare to Event 8									1	1	1	1	4
Compare to Event 9										1	-1	0	0
Compare to Event 10											-1	-1	-2
	12	11	10	9	8	7	6	5	4	3	2	1	

	t1 (4)	t2 (3.3)	t3 (3.2)
Number of tied values	2	2	2

Mann-Kendall Statistic (Total) =	-28.000
Total Number of Variables	66.000
Standard Deviation	0.990
tau	-0.424
Mean	3.692
COV	0.268
VAR(S)	211.667
Z	-1.856
Probability	0.032
MAROS Trend Conclusion	Decreasing

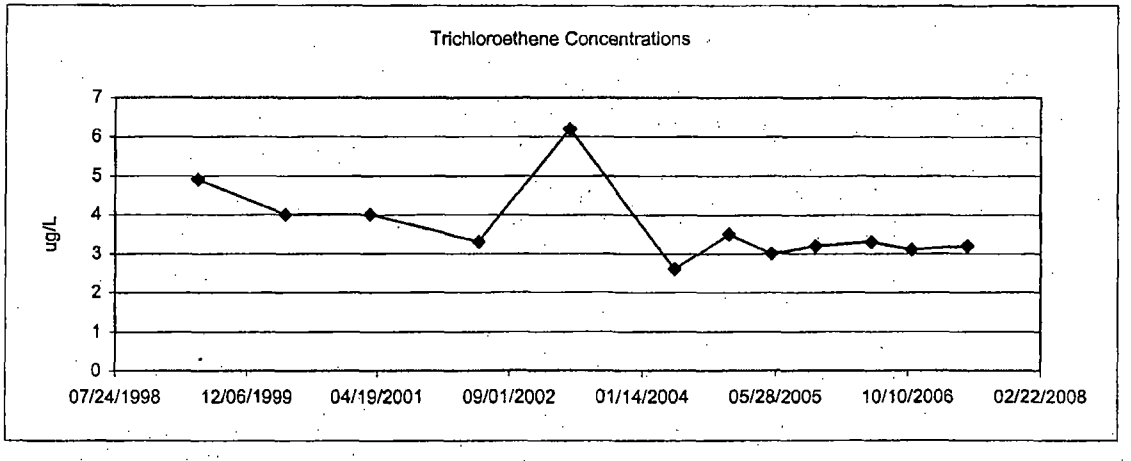
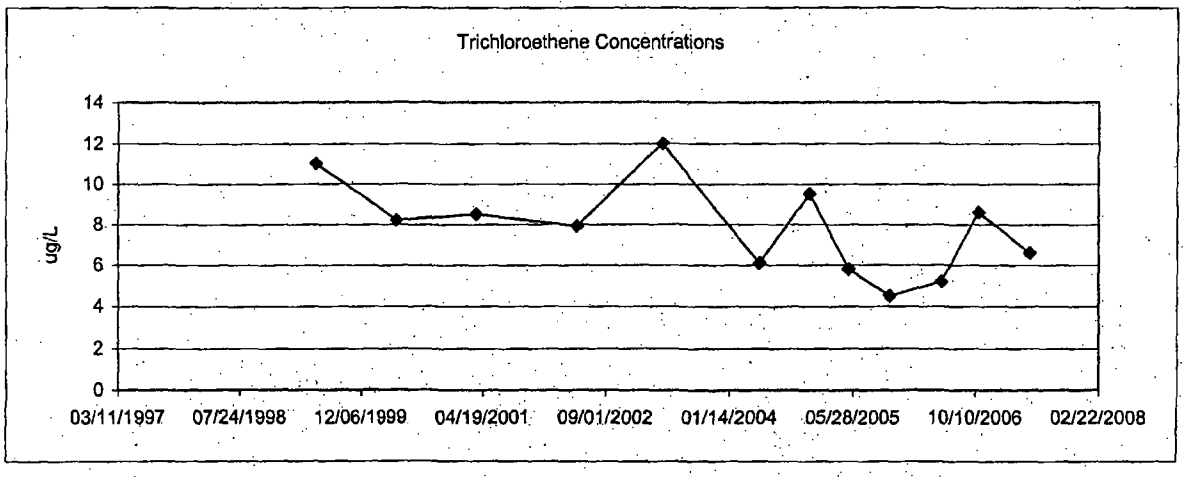


Figure 3B
MANN-KENDALL STATISTICAL ANALYSIS
PW-18

Trichloroethene Concentrations

Date	06/02/1999	05/02/2000	03/21/2001	05/08/2002	04/17/2003	05/12/2004	12/02/2004	05/10/2005	10/25/2005	05/24/2006	10/23/2006	05/21/2007	
Sampling Event	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Event 11	Event 12	
Contaminant Concentration	11	8.2	8.5	7.9	12	6.1	9.5	5.8	4.5	5.2	8.6	6.6	**Sum of Rows**
Compare to Event 1		-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-9
Compare to Event 2			1	-1	1	-1	1	-1	-1	-1	1	-1	-2
Compare to Event 3				-1	1	-1	1	-1	-1	-1	1	-1	-3
Compare to Event 4					1	-1	1	-1	-1	-1	1	-1	-2
Compare to Event 5						-1	-1	-1	-1	-1	-1	-1	-7
Compare to Event 6							1	-1	-1	-1	1	1	0
Compare to Event 7								-1	-1	-1	-1	-1	-5
Compare to Event 8									-1	-1	1	1	0
Compare to Event 9										1	1	1	3
Compare to Event 10											1	1	2
	12	11	10	9	8	7	6	5	4	3	2	1	

Mann-Kendall Statistic (Total) =	-23
Total Number of Variables	66.000
Standard Deviation	2.297
tau	-0.348
Mean	7.825
COV	0.294
VAR(S)	212.667
Z	-1.509
Probability	0.066
MAROS Trend Conclusion	Probably Decreasing



Attachment A

BARR

FIELD SAMPLING REPORT

Date: 5/22/2007

Project: 23/66-006

Contact: Marta Nelson
Barr Engineering Company
4700 W. 77th Street
Minneapolis, MN 55435-4803

Field Sampling

2nd Tier groundwater sampling was conducted at the Prairie Avenue Site on May 21, 2007

Field Report

Attachments:

* Field log cover sheet
* Field log data summary
* Field log data sheets
* Meter calibration summary
* COC # 24804
* Analytical parameter table

Laboratory Analysis Status

Samples were delivered to Legend Technical Laboratories in St Paul on May 22, 2007
Refer to chain of custody for additional information.

Kim Johannessen
Sr. Environmental Technician

BARR

FIELD LOG COVER SHEET
WATER SAMPLING

Client: Prairie Avenue Leasing **Project No:** 23/66-006

Technician: KSJ **Sampling Period:** 5/21/2007

Date	Temperature	Wind Speed	Wind Direction	Cloud Cover
5/21/2007	65-78	10-20	SSE	30%

Summary of Field Activities

* Routine methods for purging and sampling for this site were followed.
* Blind duplicate sample M-1 was collected at PW17
* Field blank FB-1 was collected at PW17
* All wells were in good condition and sampling was consistent with previous events.

WATER LEVEL REPORT

Project: PRAIRIE AVE. LEASING

Project Number: 23/66-006

Staff: KSJ Date: 5/21/07

Monitoring Location	Measuring point elevation	Water level depth	Total well depth	Static water elevation	Comments
B4	1006.54	32.40	44.0	974.14	
B5	1008.74	31.54	40.0	977.20	
B8	999.28	27.27	67.0	972.01	
B12	998.16	26.42	47.0	971.74	
W13	1006.74	32.28	96.0	974.46	
W14	999.00	26.92	79.0	972.08	
B15	1007.43		43.0	--	
PW17	1007.39	34.65	73.0	972.74	
PW18	1007.39	34.68	48.5	972.71	

WATER LEVEL REPORT

Project: PRAIRIE AVE. LEASING

Project Number: 23/66-006

Staff: KSJ Date: 5/21/07

Monitoring Location	Measuring point elevation	Water level depth	Total well depth	Static water elevation	Comments
B4	1006.54	32.40	44.0	--	
B5	1008.74	31.54	40.0	--	
B8	999.28	27.27	67.0	--	
B12	998.16	26.42	47.0	--	
W13	1006.74	32.28	96.0	--	
W14	999.00	26.92	79.0	--	
B15	1007.43		43.0	--	
PW17	1007.39	34.65	73.0	--	
PW18	1007.39	34.68	48.5	--	

FIELD DATA SUMMARY

Project: PRAIRIE AVE. LEASING

Project number: 23/66-006

Staff: KSJ

Monitoring location	Date	Temp (oC)	Conductivity @ 25 oC	pH	Eh	DO mg/l
W14	**5/21/07**	**10.8**	**575**	**7.95**	**-70**	**0.41**
B12	"	**11.4**	**685**	**7.43**	**-29**	**3.00**
B8	"	**11.0**	**561**	**7.96**	**-108**	**0.10**
B5	"	**12.6**	**643**	**7.27**	**5**	**7.92**
W13	"	**12.9**	**627**	**7.52**	**-55**	**0.97**
B4	"	**13.9**	**786**	**7.07**	**6**	**7.05**
PW17	"	**12.4**	**631**	**7.81**	**-132**	**0.08**
PW18	"	**12.3**	**661**	**7.38**	**-34**	**1.48**

Barr Engineering Company
Field Log Data Sheet

Client: Nutting / Prairie Ave leasing	Monitoring Point: W14
Location: Faribault	Date: 5/21/07
Project #: 23/66-006 Y07	Sample Time: 1200

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	4	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	79	0909/34g.	11.05	350	8.89	-276	0.15	Clear
Static water level:*	26.92	0943/68g.	10.94	596	8.70	-182	0.24	"
Water depth:*	52.1	1012/102g.	10.85	589	8.53	-128	0.26	"
Well volume: (gal)	34	1046/136g.	10.80	584	8.31	-114	0.31	"
Purge method:	Submersible	1125/170g.	10.78	578	8.14	-97	0.36	"
Sample method:	"	1159/204g.	10.83	575	7.95	-70	0.41	"
Start time:	0835	Odor: none detected						
Stop time:	1159	Purge Appearance: clear						
Duration: (minutes)	204	Sample Appearance: clear						
Rate, gpm:	1	Comments:						
Volume, purged:	204 gal							
Duplicate collected?	—							
Sample collection by:	KSJ	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: ✓ COLLAR: ✓ LOCK: ✓ OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

BARR

Barr Engineering Company
Field Log Data Sheet

Client: Nutting / Prairie Ave Leasing	Monitoring Point: B12
Location: Faribault	Date: 5/21/07
Project #: 23/66-006/07	Sample Time: 1255

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	2" SS	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	47.0	1237/10g.	11.36	680	7.46	-32	2.93	slightly cloudy
Static water level:*	26.42	1245/14g.	11.35	692	7.40	-27	3.12	clearing
Water depth:*	20.6	1251/17g.	11.37	685	7.43	-29	3.00	clear
Well volume: (gal)	3.4							
Purge method:	Submersible							
Sample method:	"							
Start time:	1217	Odor: none detected						
Stop time:	1251	Purge Appearance: begin - cloudy brown/end - clear						
Duration: (minutes)	34	Sample Appearance: clear						
Rate, gpm:	.5	Comments:						
Volume, purged:	17gal							
Duplicate collected?	-							
Sample collection by:	KSJ	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: ✓ COLLAR: ✓ LOCK: ✓ OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

Barr Engineering Company
Field Log Data Sheet

Client: Nutting / Prairie Ave Leasing	Monitoring Point: B8
Location: Faribault	Date: 5/21/07
Project #: 23/66-006 Y07	Sample Time: 1355

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	2" SS	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	67	1321/19g	11.21	531	8.15	-127	Ø.25	clear
Static water level:*	27.27	1307/25g	11.06	556	8.07	-119	Ø.19	"
Water depth:*	40	1343/31g	11.00	564	8.02	-110	Ø.12	"
Well volume: (gal)	6.5	1350/38g	11.02	561	7.96	-108	Ø.10	"
Purge method:	Submersible							
Sample method:	"							
Start time:	1312	Odor: none detected						
Stop time:	1350	Purge Appearance: clear						
Duration: (minutes)	38	Sample Appearance: clear						
Rate, gpm:	1	Comments:						
Volume, purged:	38 gal							
Duplicate collected?								
Sample collection by:	KSJ	CO2- Mn2- Fe(T)- Fe2-						

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: COLLAR: LOCK: OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

BARR

Barr Engineering Company
Field Log Data Sheet

Client: Watting / Prairie Ave Leasing	Monitoring Point: B5
Location: Faribault	Date: 5/21/07
Project #: 23/66-006 407	Sample Time: 1435

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	2" PVC	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	40	1425 1g	12.83	648	7.48	-2	8.17	Clear
Static water level:*	31.54	1429 6g	12.70	664	7.35	2	8.32	"
Water depth:*	8.5	1431 7g	12.59	647	7.30	4	8.01	"
Well volume: (gal)	1.4	1433 8g	12.55	643	7.27	5	7.92	"
Purge method:	Submersible							
Sample method:	"							
Start time:	1417	Odor: none detected						
Stop time:	1433	Purge Appearance: Clear						
Duration: (minutes)	16	Sample Appearance: Clear						
Rate, gpm:	.5	Comments:						
Volume, purged:	8 gal							
Duplicate collected?	—							
Sample collection by:	KSJ	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: ✓ COLLAR: ✓ LOCK: ✓ OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

Barr Engineering Company
Field Log Data Sheet

Client: Nutting / Prairie Ave Leasing	Monitoring Point: W13
Location: Faribault	Date: 5/21/07
Project #: 23/66-006 Y07	Sample Time: 1905

GENERAL DATA	
Barr lock:	YES
Casing diameter:	4"
Total well depth:*	96.0
Static water level:*	32.28
Water depth:*	63.7
Well volume: (gal)	42
Purge method:	Submersible
Sample method:	"
Start time:	1449
Stop time:	1902
Duration: (minutes)	252
Rate, gpm:	1
Volume, purged:	252 gal
Duplicate collected?	—
Sample collection by:	KSJ

STABILIZATION TEST

Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
1531/42g	12.89	382	8.29	-169	0.09	Clear
1613/84g	12.81	459	8.15	-149	0.17	"
1654/126g	12.74	512	8.03	-123	0.35	"
1737/168g	12.77	553	7.90	-112	0.59	"
1819/210g	12.89	590	7.73	-89	0.75	"
1902/252g	12.87	627	7.52	-55	0.97	"

Odor: none detected

Purge Appearance: clear

Sample Appearance: clear

Comments:

CO2- Mn2- Fe(T)- Fe2-

Others present: —

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: COLLAR: LOCK: OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

BARR

Barr Engineering Company
Field Log Data Sheet

Client: Nutting/Prairie Ave Leasing	Monitoring Point: B4
Location: Faribault	Date: 5/21/07
Project #: 23/66-006 407	Sample Time: 1940

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	2" PVC	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	44.0	1930/6g	13.95	783	7.20	-4	7.11	clear
Static water level:*	32.40	1934/8g	13.87	785	7.10	5	7.09	"
Water depth:*	11.7	1938/10g	13.88	786	7.07	6	7.05	"
Well volume: (gal)	1.9							
Purge method:	Submersible							
Sample method:	"							
Start time:	1918	Odor: none detected						
Stop time:	1938	Purge Appearance: clear						
Duration: (minutes)	20	Sample Appearance: clear						
Rate, gpm:	.5	Comments:						
Volume, purged:	10 gal							
Duplicate collected?	-							
Sample collection by:	KSS	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: ✓ COLLAR: ✓ LOCK: ✓ OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

Barr Engineering Company
Field Log Data Sheet

Client: Prairie Ave Leasing		Monitoring Point: AW 17	
Location: Faribault / Nuffing		Date: 5/21/07	
Project #: 23/66-006Y07		Sample Time: 2110	

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	8"	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	73.0	2020/45g.	12.49	639	7.86	-147	0.19	Clear
Static water level:*	34.65	2042/90g.	12.44	635	7.85	-140	0.11	"
Water depth:*	38.4	2105/135g.	12.38	631	7.81	-132	0.08	"
Well volume: (gal)	91							
Purge method:	Submersible							
Sample method:	"							
Start time:	1957	Odor: none detected						
Stop time:	2105	Purge Appearance: clear						
Duration: (minutes)	68	Sample Appearance: clear						
Rate, gpm:	2	Comments:						
Volume, purged:	135 gal							
Duplicate collected?	M-1/FB-1							
Sample collection by:	KSJ	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: COLLAR: LOCK: OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3+3+3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

BARR

Barr Engineering Company
Field Log Data Sheet

Client: Prairie Ave Leasing	Monitoring Point: PW18
Location: Faribault / Nutting	Date: 5/21/07
Project #: 23/66-006 Y07	Sample Time: 2215

GENERAL DATA		STABILIZATION TEST						
Barr lock:	YES							
Casing diameter:	8"	Time/ Volume	Temp. °C	Cond. @ 25	pH	Eh	D.O.	Turbidity Appearance
Total well depth:*	48.5	2139/33g.	12.33	650	7.45	-42	1.39	clear
Static water level:*	34.68	2155/66g.	12.34	657	7.41	-37	1.53	"
Water depth:*	13.8	2212/99g.	12.31	661	7.38	-34	1.48	"
Well volume: (gal)	33							
Purge method:	Submersible							
Sample method:	"							
Start time:	2122	Odor: none detected						
Stop time:	2212	Purge Appearance: clear						
Duration: (minutes)	50	Sample Appearance: clear						
Rate, gpm:	2	Comments:						
Volume, purged:	99 gal							
Duplicate collected?	-							
Sample collection by:	KSJ	CO2-	Mn2-	Fe(T)-	Fe2-			

Others present:

WELL INSPECTION (answer for each category, state if lock replaced, detail any repairs needed on back of form)

CASING & CAP: COLLAR: LOCK: OTHER:

MW: groundwater monitoring well WS: water supply well SW: surface water SE: sediment other:

VOC- 3 semi-volatile- general- nutrient- cyanide- DRO- Sulfide-

oil,grease- bacteria- total metal- filtered metal- methane- filter-

Others:

*Measurements are referenced from top of riser pipe, unless otherwise indicated.

BARR ENGINEERING COMPANY
METER CALIBRATION SUMMARY

PROJECT Nutting / Prairie Ave Leaching
TECHNICIAN RSJ

WEATHER CONDITIONS

Date	Wind Direction	Wind Speed	Temperature F	Cloud Cover	Comments
5/21/07	SSE	10-20	65-78	30%	

Meter type and number	Date	Time	Temperature C	Standard Solution	pH Meter Reading	Cond. Cell Result	ORP Reading
431 556	5/21/07	0810	18	7/10	7.00/10.00	1000 umhos	239
231 +- 10mV @ 25C							
231mV = Display Value + [(Display Temp. - 25 C) x (1.3 mV)]							

Chain of Custody

BARR
4700 West 77th Street
Minneapolis, MN 55435-4803
(952) 832-2600

Project Number: 23/66-006 Y07
Project Name: 24804

COC ____ of ____

Project Manager: MSH
Project Contact: MSH
Sampled by: KSJ
Laboratory: Legend

Sample Identification	Collection Date	Collection Time	Matrix: Water	Matrix: Soil	Matrix:	Type: Grab	Type: Comp.	Type: QC	Number of Containers/Preservative — Water: Volatile Organics (Pres.) *1	Semivolatile Organics *2	Dissolved Metals (HNO_3)	Total Metals (HNO_3)	General (Unpreserved) *3	Cyanide (NaOH)	Nutrients (H_2SO_4) *4	Oil and Grease (H_2SO_4)	Sulfide (Zn Acetate)	Methane	Bacteria ($Na_2S_2O_3$)	DRO (HCl)	Soil: VOCs (2-oz tared MeOH) *7	GRO, BTEX (2-oz tared MeOH) *7	DRO (2-oz tared) - 25 grams	Metals (2-oz unpreserved)	SVOCs (2 or 4-oz unpres.) *2	% Moisture (plastic vial, unpres.)	Total No. Of Containers	Remarks
1. W14	5/21/07	1200	✓			✓			(3)																		3	Partial List VOCs
2. B12		1255	✓			✓			(3)																		3	
3. B8		1355	✓			✓			(3)																		3	
4. B5		1435	✓			✓			(3)																		3	
5. W13		1905	✓			✓			(3)																		3	
6. B4		1940	✓			✓			(3)																		3	
7. PW17		2110	✓			✓			(3)																		3	
8. PW18		2215	✓			✓			(3)																		3	
9. M-1 (PW-17)																												
10. FB-1																												
11. TB																												
12.																												

Common Parameter/Container - Preservation Key
*1 - Volatile Organics = BTEX, GRO, TPH, Full List
*2 - Semivolatile Organics = PAHs, PCP, Dioxins, Full List, Herbicide/Pesticide/PCBs
*3 - General = pH, Chloride, Flouride, Alkalinity, TSS, TDS, TS, Sulfate
*4 - Nutrients = COD, TOC, Phenols, Ammonia Nitrogen, TKN

Relinquished By	On Ice? (Y/N)	Date	Time	Received by:	Date	Time
[signature]	Y N	5/22/07				
Relinquished By:	On Ice? Y N	Date	Time	Received by:	Date	Time

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other ____
Air Bill Number:

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

Attachment B

LEGEND
Technical Services, Inc.
www.legend-group.com

88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

June 05, 2007

Ms. Marta Nelson
Barr Engineering Co.
4700 W 77th St
Minneapolis, MN 55435

Work Order Number: 0702449
RE: 23/66-006

Enclosed are the results of analyses for samples received by the laboratory on 05/22/07. If you have any questions concerning this report, please feel free to contact me.

All samples will be retained by LEGEND, unless consumed in the analysis, for 30 days from the date of this report and then discarded unless other arrangements are made.

MDH Certification #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

Terri A. Olson
Terri Olson
Client Manager II
tolson@legend-group.com

Lisa Bloomgren
Lisa Bloomgren
QA/QC Coordinator
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M-1 = PW17

LEGEND
Technical Services, Inc.
www.legend-group.com

88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W14	0702449-01	Water	05/21/07 12:00	05/22/07 09:30
B12	0702449-02	Water	05/21/07 12:55	05/22/07 09:30
B8	0702449-03	Water	05/21/07 13:55	05/22/07 09:30
B5	0702449-04	Water	05/21/07 14:35	05/22/07 09:30
W13	0702449-05	Water	05/21/07 19:05	05/22/07 09:30
B4	0702449-06	Water	05/21/07 19:40	05/22/07 09:30
PW17	0702449-07	Water	05/21/07 21:10	05/22/07 09:30
PW18	0702449-08	Water	05/21/07 22:15	05/22/07 09:30
M-1	0702449-09	Water	05/21/07 00:00	05/22/07 09:30
FB-1	0702449-10	Water	05/21/07 00:00	05/22/07 09:30
Trip Blank	0702449-11	Water	05/14/07 00:00	05/22/07 09:30

Shipping Container Information

Default Cooler Temperature (°C): 2.6

Received on ice: Yes
Temperature blank was present
Received on ice pack: No
Received on melt water: No
Ambient: No
Acceptable (IH/ISO only): No
Custody seals: No

Case Narrative:

Recoveries for trichloroethene in the MS/MSD were below laboratory limits. Recoveries in the LCS/LCSD samples were within limits. Sample W13 was used as the MS/MSD source sample.

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W14 (0702449-01) Water Received:05/22/07 09:30 Sampled:05/21/07 12:00										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2509	05/24/07	05/24/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*100*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*104*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*101*			*80-120 %*		"	"	"	"	
B12 (0702449-02) Water Received:05/22/07 09:30 Sampled:05/21/07 12:55										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2509	05/24/07	05/24/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*99.2*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*104*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*100*			*80-120 %*		"	"	"	"	
B8 (0702449-03) Water Received:05/22/07 09:30 Sampled:05/21/07 13:55										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*98.7*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*105*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*99.8*			*80-120 %*		"	"	"	"	
B5 (0702449-04) Water Received:05/22/07 09:30 Sampled:05/21/07 14:35										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5 (0702449-04) Water Received:05/22/07 09:30 Sampled:05/21/07 14:35										
Surrogate: 4-Bromofluorobenzene	*98.7*			*80-125 %*		*B7E2511*	*05/25/07*	*05/25/07*	*EPA 8260B*	
Surrogate: Dibromofluoromethane	*105*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*98.9*			*80-120 %*		"	"	"	"	
W13 (0702449-05) Water Received:05/22/07 09:30 Sampled:05/21/07 19:05										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	**1.7**	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	**16**	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*101*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*105*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*101*			*80-120 %*		"	"	"	"	
B4 (0702449-06) Water Received:05/22/07 09:30 Sampled:05/21/07 19:40										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	**9.7**	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*100*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*104*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*100*			*80-120 %*		"	"	"	"	
PW17 (0702449-07) Water Received:05/22/07 09:30 Sampled:05/21/07 21:10										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	**1.2**	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	**3.2**	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*100*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*106*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*102*			*80-120 %*		"	"	"	"	
PW18 (0702449-08) Water Received:05/22/07 09:30 Sampled:05/21/07 22:15										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PW18 (0702449-08) Water Received:05/22/07 09:30 Sampled:05/21/07 22:15										
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	5.6	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*101*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*106*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*101*			*80-120 %*		"	"	"	"	
M-1 (0702449-09) Water Received:05/22/07 09:30 Sampled:05/21/07 00:00										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	1.1	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	3.1	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*101*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*107*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*102*			*80-120 %*		"	"	"	"	
FB-1 (0702449-10) Water Received:05/22/07 09:30 Sampled:05/21/07 00:00										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2511	05/25/07	05/25/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*99.0*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*106*			*80-121 %*		"	"	"	"	
Surrogate: Toluene-d8	*101*			*80-120 %*		"	"	"	"	
Trip Blank (0702449-11) Water Received:05/22/07 09:30 Sampled:05/14/07 00:00										
1,1-Dichloroethene	<1.0	1.0	0.20	ug/L	1	B7E2509	05/24/07	05/24/07	EPA 8260B	
cis-1,2-Dichloroethene	<1.0	1.0	0.29	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.28	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.31	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*95.4*			*80-125 %*		"	"	"	"	
Surrogate: Dibromofluoromethane	*107*			*80-121 %*		"	"	"	"	

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (0702449-11) Water Received:05/22/07 09:30 Sampled:05/14/07 00:00										
Surrogate: Toluene-d8	*101*			*80-120 %*		*B7E2509*	*05/24/07*	*05/24/07*	*EPA 8260B*	

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B7E2509 - Volatiles											
Blank (B7E2509-BLK1)					Prepared & Analyzed: 05/24/07						
1,1-Dichloroethene	< 1.0	1.0	0.20	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.29	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.17	ug/L							
Trichloroethene	< 1.0	1.0	0.28	ug/L							
Vinyl chloride	< 1.0	1.0	0.31	ug/L							
Surrogate: 4-Bromofluorobenzene	*59.7*			*ug/L*	*61.0*		*97.9*	*80-125*			
Surrogate: Dibromofluoromethane	*62.5*			*ug/L*	*61.0*		*102*	*80-121*			
Surrogate: Toluene-d8	*60.7*			*ug/L*	*61.0*		*99.5*	*80-120*			
LCS (B7E2509-BS1)					Prepared & Analyzed: 05/24/07						
1,1-Dichloroethene	47.9	1.0	0.20	ug/L	50.0		95.8	80-120			
cis-1,2-Dichloroethene	49.2	1.0	0.29	ug/L	50.0		98.4	80-120			
trans-1,2-Dichloroethene	49.3	1.0	0.17	ug/L	50.0		98.6	80-120			
Trichloroethene	48.8	1.0	0.28	ug/L	50.0		97.6	80-120			
Vinyl chloride	50.8	1.0	0.31	ug/L	50.0		102	75-125			
Surrogate: 4-Bromofluorobenzene	*64.6*			*ug/L*	*61.0*		*106*	*80-125*			
Surrogate: Dibromofluoromethane	*62.3*			*ug/L*	*61.0*		*102*	*80-121*			
Surrogate: Toluene-d8	*63.1*			*ug/L*	*61.0*		*103*	*80-120*			
Matrix Spike (B7E2509-MS1)		**Source: 0702361-01**			Prepared & Analyzed: 05/24/07						
1,1-Dichloroethene	49.4	1.0	0.20	ug/L	50.0	<1.0	98.8	80-120			
cis-1,2-Dichloroethene	50.7	1.0	0.29	ug/L	50.0	<1.0	101	80-120			
trans-1,2-Dichloroethene	50.6	1.0	0.17	ug/L	50.0	<1.0	101	80-120			
Trichloroethene	48.9	1.0	0.28	ug/L	50.0	<1.0	97.8	75-125			
Vinyl chloride	52.3	1.0	0.31	ug/L	50.0	<1.0	105	75-125			
Surrogate: 4-Bromofluorobenzene	*65.3*			*ug/L*	*61.0*		*107*	*80-125*			
Surrogate: Dibromofluoromethane	*61.4*			*ug/L*	*61.0*		*101*	*80-121*			
Surrogate: Toluene-d8	*62.9*			*ug/L*	*61.0*		*103*	*80-120*			

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B7E2509 - Volatiles											
Matrix Spike Dup (B7E2509-MSD1)		**Source: 0702361-01**			Prepared & Analyzed: 05/24/07						
1,1-Dichloroethene	49.0	1.0	0.20	ug/L	50.0	<1.0	98.0	80-120	0.813	20	
cis-1,2-Dichloroethene	49.4	1.0	0.29	ug/L	50.0	<1.0	98.8	80-120	2.60	20	
trans-1,2-Dichloroethene	49.7	1.0	0.17	ug/L	50.0	<1.0	99.4	80-120	1.79	20	
Trichloroethene	49.8	1.0	0.28	ug/L	50.0	<1.0	99.6	75-125	1.82	20	
Vinyl chloride	50.3	1.0	0.31	ug/L	50.0	<1.0	101	75-125	3.90	20	
Surrogate: 4-Bromofluorobenzene	*64.5*			*ug/L*	*61.0*		*106*	*80-125*			
Surrogate: Dibromofluoromethane	*62.9*			*ug/L*	*61.0*		*103*	*80-121*			
Surrogate: Toluene-d8	*62.7*			*ug/L*	*61.0*		*103*	*80-120*			
Batch B7E2511 - Volatiles											
Blank (B7E2511-BLK1)					Prepared & Analyzed: 05/25/07						
1,1-Dichloroethene	< 1.0	1.0	0.20	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.29	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.17	ug/L							
Trichloroethene	< 1.0	1.0	0.28	ug/L							
Vinyl chloride	< 1.0	1.0	0.31	ug/L							
Surrogate: 4-Bromofluorobenzene	*59.3*			*ug/L*	*61.0*		*97.2*	*80-125*			
Surrogate: Dibromofluoromethane	*62.8*			*ug/L*	*61.0*		*103*	*80-121*			
Surrogate: Toluene-d8	*61.8*			*ug/L*	*61.0*		*101*	*80-120*			
LCS (B7E2511-BS1)					Prepared & Analyzed: 05/25/07						
1,1-Dichloroethene	47.1	1.0	0.20	ug/L	50.0		94.2	80-120			
cis-1,2-Dichloroethene	47.9	1.0	0.29	ug/L	50.0		95.8	80-120			
trans-1,2-Dichloroethene	47.6	1.0	0.17	ug/L	50.0		95.2	80-120			
Trichloroethene	48.5	1.0	0.28	ug/L	50.0		97.0	80-120			
Vinyl chloride	46.6	1.0	0.31	ug/L	50.0		93.2	75-125			
Surrogate: 4-Bromofluorobenzene	*65.2*			*ug/L*	*61.0*		*107*	*80-125*			
Surrogate: Dibromofluoromethane	*62.5*			*ug/L*	*61.0*		*102*	*80-121*			
Surrogate: Toluene-d8	*63.7*			*ug/L*	*61.0*		*104*	*80-120*			

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Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

VOC GCMS 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B7E2511 - Volatiles											
Matrix Spike (B7E2511-MS1)		**Source: 0702449-05**			Prepared & Analyzed: 05/25/07						
1,1-Dichloroethene	47.2	1.0	0.20	ug/L	50.0	<1.0	94.4	80-120			
cis-1,2-Dichloroethene	47.7	1.0	0.29	ug/L	50.0	1.69	92.0	80-120			
trans-1,2-Dichloroethene	47.7	1.0	0.17	ug/L	50.0	<1.0	95.4	80-120			
Trichloroethene	48.7	1.0	0.28	ug/L	50.0	16.2	65.0 ✓	75-125			QM-07
Vinyl chloride	45.4	1.0	0.31	ug/L	50.0	<1.0	90.8	75-125			
Surrogate: 4-Bromofluorobenzene	*64.4*			*ug/L*	*61.0*		*106*	*80-125*			
Surrogate: Dibromofluoromethane	*62.4*			*ug/L*	*61.0*		*102*	*80-121*			
Surrogate: Toluene-d8	*63.5*			*ug/L*	*61.0*		*104*	*80-120*			
Matrix Spike Dup (B7E2511-MSD1)		**Source: 0702449-05**			Prepared & Analyzed: 05/25/07						
1,1-Dichloroethene	47.5	1.0	0.20	ug/L	50.0	<1.0	95.0	80-120	0.634	20	
cis-1,2-Dichloroethene	48.3	1.0	0.29	ug/L	50.0	1.69	93.2	80-120	1.25	20	
trans-1,2-Dichloroethene	47.7	1.0	0.17	ug/L	50.0	<1.0	95.4	80-120	0.00	20	
Trichloroethene	49.4	1.0	0.28	ug/L	50.0	16.2	66.4 ✓	75-125	1.43	20	QM-07
Vinyl chloride	45.5	1.0	0.31	ug/L	50.0	<1.0	91.0	75-125	0.220	20	
Surrogate: 4-Bromofluorobenzene	*63.2*			*ug/L*	*61.0*		*104*	*80-125*			
Surrogate: Dibromofluoromethane	*62.7*			*ug/L*	*61.0*		*103*	*80-121*			
Surrogate: Toluene-d8	*63.1*			*ug/L*	*61.0*		*103*	*80-120*			

LEGEND
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88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

Barr Engineering Co.	Project: 23/66-006	
4700 W 77th St	Project Number: 23/66-006Y07	**Date Reported:**
Minneapolis MN, 55435	Project Manager: Ms. Marta Nelson	June 05, 2007

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
<	Less than value listed
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit
RL	Reporting Limit

Legend Technical Services, Inc.

BARR

Chain of Custody

4700 West 77th Street
Minneapolis, MN 55435-4803
(952) 832-2600

0702449

Project Number: 23/66-006 Y07

Project Name:

№ 24804

COC ____ of ____

Project Manager: MSH

Project Contact: MSH

Sampled by: KSJ

Laboratory: Legend

Number of Containers/Preservative — Water: Volatile Organics (Pres.) *1; Semivolatile Organics *2; Dissolved Metals (HNO_3); Total Metals (HNO_3); General (Unpreserved) *3; Cyanide (NaOH); Nutrients (H_2SO_4) *4; Oil and Grease (H_2SO_4); Sulfide (Zn Acetate); Methane; Bacteria ($Na_2S_2O_3$); DRO (HCl). Soil: VOCs (2-oz tared MeOH) *2; GRO, BTEX (2-oz tared MeOH) *1; DRO (2-oz tared) - 25 grams; Metals (2-oz unpreserved); SVOCs (2 or 4-oz unpres.) *2; % Moisture (plastic vial, unpres.).

No.	Sample Identification	Date	Time	Water	Soil	Grab	Comp.	QC	Volatile Organics	Semivolatile Organics	Dissolved Metals	Total Metals	General	Cyanide	Nutrients	Oil and Grease	Sulfide	Methane	Bacteria	DRO (HCl)	VOCs (soil)	GRO, BTEX	DRO (soil)	Metals (soil)	SVOCs	% Moisture	Total No. Of Containers	Remarks
1. -01	W14	5/21/07	1200	✓		✓			3																		3	Partial List VOCs
2. -02	B12		1255	✓		✓			3																		3	"
3. -03	B8		1355	✓		✓			3																		3	↓
4. -04	B5		1435	✓		✓			3																		3	
5. -05	W13		1905	✓		✓			3																		3	
6. -06	B4		1940	✓		✓			3																		3	
7. -07	PW17		2110	✓		✓			3																		3	
8. -08	PW18		2215	✓		✓			3																		3	
9. -09	M-1																											
10. -10	FB-1																											
11. -11	TB																											
12.																												On ice 2.6

Common Parameter/Container - Preservation Key

*1 - Volatile Organics = BTEX, GRO, TPH, Full List
*2 - Semivolatile Organics = PAHs, PCP, Dioxins, Full List, Herbicide/Pesticide/PCBs
*3 - General = pH, Chloride, Flouride, Alkalinity, TSS, TDS, TS, Sulfate
*4 - Nutrients = COD, TOC, Phenols, Ammonia Nitrogen, TKN

Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
[illegible signature]	(Y) N	5/22/07				
Relinquished By:	On Ice? Y N	Date	Time	Received by: [illegible signature]	5/22/07	9:30

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☑ Sampler ☐ Other [illegible signature]

Air Bill Number:

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

H:RLG\STFORMS\Chain of Custody Form RLG Rev. 07/01/05

LEGEND
Technical Services, Inc.
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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

APPENDIX D

Cumulative Analytical Data

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	1,2-Dichloroethylene	1,2-Dichloroethylene,cis	1,2-Dichloroethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloroethylene
B4	08/25/1982	--	<1	--	<1	<1	<1	--	--	<1	--	<1	<1	<1	<1
B4	03/29/1983	--	--	--	<1	<1	--	--	--	<1	--	--	--	<1	--
B4	06/29/1983	--	--	--	<1	<0.2	--	--	--	<1	--	--	--	<1	--
B4	09/27/1983	--	--	--	<1	<0.2	--	--	--	<1	--	--	--	<1	--
B4	10/03/1984	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.3	<0.3	--	<1.0	<1.0	<1.0	<1.0
B4	10/17/1984	<0.20	<0.20	<2	<0.20	<0.20	<0.20	--	1.6	<0.20	<10	<0.50	0.30	1.4	<2
B4	10/18/1984	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	<0.3	--	<1.0	<1.0	BMDL	<1.0
B4	07/18/1985	--	<0.5	<1.0	<0.2	<0.4	<0.2	--	<0.5	<0.3	--	<2.0	<0.5	<1.0	<1.0
B4	01/27/1986	--	<0.5	<1.0	<0.2	<0.4	<0.2	--	--	<0.3	--	--	<0.5	<1.0	<1.0
B4	*06/25/1986*	--	*<0.5*	*<1.0*	*1.0*	*<0.3*	*1.3*	--	--	*3.9*	--	--	*1.1 **	*<1.0*	*<1.0*
B4	11/27/1986	--	<1.0	<1.0	<0.2	5.9	1.6	--	--	2.2	--	--	2.3 b	5.1 b	<1.0
B4	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
B4	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
B4	05/08/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B4	12/11/1990	--	--	--	--	<0.3	--	--	1.5	<0.3	--	--	--	--	--
B4	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
B4	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	0.6	--	0.6	<0.3	--	--	<0.5	<1.0	<1.0
B4	11/21/1991	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B4	06/11/1992	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	--	<0.5	<0.5	<40	<0.5	<0.5	<1.0	<1.0
B4	11/24/1992	--	--	--	--	--	--	--	<1.0	--	--	--	--	--	--
B4	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B4	11/11/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B4	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
B4	10/25/1994	<0.3	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	<40	<1.0	<0.5	<1.0	<1.0
B4	05/24/1995	--	--	--	--	<1.5	--	--	<2.5	<1.5	--	--	--	--	--
B4	09/25/1995	--	--	--	--	<1.5	--	--	<2.5	<1.5	--	--	--	--	--
B4	08/02/1996	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	--	<5.0	<5.0	<200	<2.5	<2.5	12 b	<2.5
B4	11/20/1996	--	--	--	--	<0.5	--	--	<1.0	<1.0	--	--	--	--	--
B4	05/30/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B4	11/26/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B4	05/19/1998	--	--	--	--	0.66	--	--	<0.50	<0.50	--	--	--	--	--
B4	06/02/1999	--	--	--	--	<0.50	--	--	0.57	<0.50	--	--	--	--	--
B4	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
B4	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	0.52	<0.50	<10	<0.50	<0.50	<5.0	<0.50
B4	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
B4	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B4	05/21/2007	--	--	--	--	*<1.0*	--	--	*<1.0*	<1.0	--	--	--	--	--
B5	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B5	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
B5	08/02/1996	--	0.63	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	--	--	<0.50	3.1 b	<0.50
B5	05/19/1998	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B5	06/02/1999	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
B4	08/25/1982	<1	580	--
B4	03/29/1983	<1	450	--
B4	06/29/1983	<0.2	440	--
B4	09/27/1983	<1	450	--
B4	10/03/1984	<1.0	250	<1.0
B4	10/17/1984	<0.50	100	DLND
B4	10/18/1984	--	570	<1.0
B4	07/18/1985	<1.0	410 b	<1.5
B4	01/27/1986	--	350	<1.5
B4	06/25/1986	--	330	<1.5
B4	11/27/1986	--	95 b	<1.5
B4	05/15/1989	--	140	--
B4	10/23/1989	--	47	--
B4	05/08/1990	--	26	--
B4	12/11/1990	--	73	--
B4	06/18/1991	<0.2	48	<1.0
B4	06/18/1991	--	62	<1.5
B4	11/21/1991	--	36	--
B4	06/11/1992	<0.8	44	<1.5
B4	11/24/1992	--	37	--
B4	07/14/1993	--	28	--
B4	11/11/1993	--	20	--
B4	05/12/1994	--	31	--
B4	10/25/1994	<1.0	49	<1.5
B4	05/24/1995	--	84	--
B4	09/25/1995	--	77	--
B4	08/02/1996	<2.5	100	<5.0
B4	11/20/1996	--	68	--
B4	05/30/1997	--	73	--
B4	11/26/1997	--	82	--
B4	05/19/1998	--	47	--
B4	06/02/1999	--	350	--
B4	05/02/2000	--	130	--
B4	03/21/2001	<0.50	200	<1.0
B4	05/08/2002	<5.0	150	<5.0
B4	04/17/2003	--	82	<1.0
B4	05/12/2004	--	35	<0.20
B4	12/02/2004	--	47	--
B4	05/10/2005	--	24	<1.0
B4	10/25/2005	--	27	<1.0
B4	05/24/2006	--	17	<1.0
B4	10/23/2006	--	18	<1.0
B4	05/21/2007	--	9.7	<1.0
B5	06/11/1992	--	12	--
B5	05/12/1994	--	17	--
B5	08/02/1996	--	4.9	<1.0
B5	05/19/1998	--	9.1	--
B5	06/02/1999	--	1.7	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
B5	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
B5	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
B5	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
B5	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B5	05/21/2007	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B6	11/21/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
B6	11/21/1991	--	--	--	--	<0.3	--	--	--	--	--	--	--	--	--
B7	08/02/1996	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	<40	<0.50	<0.50	1.7 b	<0.50
B8	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
B8	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
B8	05/08/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	12/11/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
B8	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0
B8	11/21/1991	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
B8	05/24/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B8	08/02/1996	--	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	--	--	<0.50	3.2 b	<0.50
B8	05/30/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B8	05/19/1998	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B8	06/02/1999	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B8	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
B8	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
B8	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
B8	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B8	05/21/2007	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B9	11/21/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
B9	11/21/1991	--	--	--	--	<0.3	--	--	--	--	--	--	--	--	--
B12	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
B12	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
B12	05/08/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	12/11/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
B5	05/02/2000	--	2.2	--
B5	03/21/2001	<0.50	2.4	<1.0
B5	05/08/2002	<5.0	<5.0	<5.0
B5	04/17/2003	--	1.1	<1.0
B5	05/12/2004	--	1.0	<0.20
B5	12/02/2004	--	2.1	--
B5	05/10/2005	--	1.3	<1.0
B5	10/25/2005	--	2.4	<1.0
B5	05/24/2006	--	1.6	<1.0
B5	10/23/2006	--	<1.0	<1.0
B5	05/21/2007	--	<1.0	<1.0
B6	11/21/1991	<0.2	<0.1	<1.0
B6	11/21/1991	--	<0.5	--
B7	08/02/1996	<0.50	<0.50	<1.0
B8	05/15/1989	--	<0.50	--
B8	10/23/1989	--	<0.5	--
B8	05/08/1990	--	<0.5	--
B8	12/11/1990	--	<0.5	--
B8	06/18/1991	<0.2	<0.1	<1.0
B8	06/18/1991	--	<0.5	<1.5
B8	11/21/1991	--	<0.5	--
B8	06/11/1992	--	<0.5	--
B8	06/11/1992	--	<0.5	--
B8	07/14/1993	--	<0.5	--
B8	05/12/1994	--	<0.5	--
B8	05/24/1995	--	0.8	--
B8	08/02/1996	--	<0.50	<1.0
B8	05/30/1997	--	<0.50	--
B8	05/19/1998	--	<0.50	--
B8	06/02/1999	--	<0.50	--
B8	05/02/2000	--	0.77	--
B8	03/21/2001	<0.50	<0.50	<1.0
B8	05/08/2002	<5.0	<5.0	<5.0
B8	04/17/2003	--	<1.0	<1.0
B8	05/12/2004	--	<1.0	<0.20
B8	12/02/2004	--	<1.0	--
B8	05/10/2005	--	<1.0	<1.0
B8	10/25/2005	--	<1.0	<1.0
B8	05/24/2006	--	<1.0	<1.0
B8	10/23/2006	--	<1.0	<1.0
B8	05/21/2007	--	<1.0	<1.0
B9	11/21/1991	<0.2	<0.1	<1.0
B9	11/21/1991	--	<0.5	--
B12	05/15/1989	--	<0.50	--
B12	10/23/1989	--	<0.5	--
B12	05/08/1990	--	<0.5	--
B12	12/11/1990	--	<0.5	--
B12	06/18/1991	<0.2	0.2	<1.0

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
B12	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0
B12	11/21/1991	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
B12	05/24/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B12	08/02/1996	--	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	--	--	<0.50	6.1 b	<0.50
B12	05/30/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B12	05/19/1998	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B12	06/02/1999	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
B12	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
B12	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
B12	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
B12	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B12	05/21/2007	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
B15	11/25/1987	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	0.4	--	<1.0	<0.5	<1.0	<1.0
B15	12/11/1987	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	0.4	--	<1.0	<0.5	<1.0	<1.0
B15	02/04/1988	--	1.0	<1.0	<0.2	<0.3	<0.2	--	--	0.3	--	<1.0	<0.5	1.2	<1.0
B15	09/01/1988	--	--	--	--	<0.3	--	--	--	<0.3	--	--	--	--	--
B15	04/07/1989	--	<0.5	<1.0	<0.2	<0.3	<0.2	<0.3	--	--	--	<1.0	<0.5	<2.0	<1.0
B15	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
B15	08/16/1989	--	--	--	--	<0.30	--	<0.30	--	--	--	--	--	--	--
B15	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
B15	01/02/1990	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	<1.0	<0.5	<1.0	<1.0
B15	05/08/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	08/20/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	12/11/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	03/11/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0
B15	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
B15	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0
B15	09/10/1991	--	--	--	--	<0.3	--	<0.2	--	--	--	--	--	--	--
B15	11/21/1991	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	11/24/1992	--	--	--	--	--	--	--	<1.0	--	--	--	--	--	--
B15	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	11/11/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
B15	10/25/1994	<0.3	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	<40	<1.0	<0.5	<1.0	<1.0
B15	05/24/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	09/25/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
B15	08/02/1996	--	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	--	--	1.0	6.2 b	<0.50
B15	11/20/1996	--	--	--	--	<0.5	--	--	1.2	<1.0	--	--	--	--	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
B15	05/30/1997	--	2.7	--
B15	11/26/1997	--	2.6	--
B15	05/19/1998	--	2.3	--
B15	06/02/1999	--	8.3	--
B15	07/07/2000	--	3.5	--
B15	03/21/2001	<0.50	21	<1.0
B15	05/08/2002	<5.0	2.4 J	<5.0
B15	04/17/2003	--	12	<1.0
PW17	11/25/1987	<2.0	59	<3.0
PW17	12/03/1987	--	57	--
PW17	12/11/1987	--	37	--
PW17	12/21/1987	--	42	--
PW17	01/13/1988	--	50	--
PW17	02/04/1988	--	27	--
PW17	03/21/1988	--	53	--
PW17	05/18/1988	--	21	--
PW17	07/27/1988	--	33	--
PW17	09/01/1988	--	83	--
PW17	11/18/1988	--	57	--
PW17	04/07/1989	<1.0	54	<1.5
PW17	05/15/1989	--	36	--
PW17	08/16/1989	--	32	--
PW17	10/23/1989	--	46	--
PW17	01/02/1990	<5.0	40	<7.5
PW17	05/08/1990	--	29	--
PW17	05/08/1990	--	30	--
PW17	08/20/1990	--	27	--
PW17	08/20/1990	--	30	--
PW17	12/11/1990	--	28	--
PW17	12/11/1990	--	27	--
PW17	03/11/1991	--	20	<1.5
PW17	03/11/1991	--	28	<1.5
PW17	06/18/1991	<0.2	18	<1.0
PW17	06/18/1991	--	19	<1.5
PW17	09/10/1991	--	31	--
PW17	11/21/1991	--	16	--
PW17	06/11/1992	<0.8	29	<1.5
PW17	09/22/1992	--	6.6	<1.5
PW17	11/24/1992	--	8.9	--
PW17	03/29/1993	--	7.5	--
PW17	07/14/1993	--	5.2	--
PW17	09/08/1993	--	7.7	--
PW17	11/11/1993	--	6.2	--
PW17	10/25/1994	<1.0	3.4	<1.5
PW17	05/24/1995	--	4.4	--
PW17	09/25/1995	--	3.8	--
PW17	08/02/1996	<0.50	5.0	<1.0
PW17	11/20/1996	--	4.2	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
PW17	05/30/1997	--	--	--	--	<0.50	--	--	0.99	<0.50	--	--	--	--	--
PW17	11/26/1997	--	--	--	--	<0.50	--	--	0.56	<0.50	--	--	--	--	--
PW17	05/19/1998	--	--	--	--	<0.50	--	--	0.51	<0.50	--	--	--	--	--
PW17	06/02/1999	--	--	--	--	<0.50	--	--	0.58	<0.50	--	--	--	--	--
PW17	05/02/2000	--	--	--	<0.30	<0.20	--	--	0.53	<0.30	--	--	--	--	--
PW17	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	0.75	<0.50	<10	<0.50	<0.50	<5.0	<0.50
PW17	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
PW17	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	10/25/2005	--	--	--	--	<1.0	--	--	1.0	<1.0	--	--	--	--	--
PW17	10/25/2005	--	--	--	--	<1.0	--	--	1.1	<1.0	--	--	--	--	--
PW17	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW17	05/21/2007	--	--	--	--	<1.0	--	--	1.2	<1.0	--	--	--	--	--
PW17	05/21/2007	--	--	--	--	<1.0	--	--	1.1	<1.0	--	--	--	--	--
PW17-BTM	12/02/2004	--	--	--	--	<1.0	--	--	1.2	<1.0	--	--	--	--	--
PW17-TOP	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	11/25/1987	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	3.4	--	<1.0	<0.5	<1.0	<1.0
PW18	12/03/1987	--	--	--	--	<0.3	--	--	--	1.5	--	--	--	--	--
PW18	12/11/1987	--	--	--	--	<0.3	--	--	--	<0.3	--	--	--	--	--
PW18	12/21/1987	--	--	--	--	--	--	--	--	<0.3	--	--	--	--	--
PW18	01/13/1988	--	--	--	--	<0.3	--	--	--	1.3	--	--	--	--	--
PW18	02/04/1988	--	--	--	--	<0.3	--	--	--	1.1	--	--	--	--	--
PW18	03/21/1988	--	--	--	--	0.9	--	--	--	<0.3	--	--	--	--	--
PW18	05/18/1988	--	--	--	--	<0.3	--	--	--	1.7	--	--	--	--	--
PW18	07/27/1988	--	--	--	--	<0.3	--	--	--	1.0	--	--	--	--	--
PW18	09/01/1988	--	--	--	--	<0.3	--	--	--	1.6	--	--	--	--	--
PW18	11/18/1988	--	--	--	--	<0.3	--	--	--	1.1	--	--	--	--	--
PW18	04/07/1989	--	<0.5	<1.0	<0.2	<0.3	<0.2	<0.3	--	--	--	<1.0	<0.5	<2.0	<1.0
PW18	05/15/1989	--	--	--	--	<0.20	--	0.9	--	--	--	--	--	--	--
PW18	08/16/1989	--	--	--	--	<0.30	--	1.5	--	--	--	--	--	--	--
PW18	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
PW18	01/02/1990	--	<2.5	<5.0	<1.0	<1.5	<1.0	--	<2.5	<1.5	--	<5.0	<2.5	<5.0	<5.0
PW18	05/08/1990	--	--	--	--	<0.3	--	--	1.4	<0.3	--	--	--	--	--
PW18	08/20/1990	--	--	--	--	<0.3	--	--	1.4	<0.3	--	--	--	--	--
PW18	12/11/1990	--	--	--	--	<0.3	--	--	1.7	<0.3	--	--	--	--	--
PW18	03/11/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	0.9	<0.3	--	--	<0.5	<1.0	<1.0
PW18	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
PW18	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	0.7	<0.3	--	--	<0.5	<1.0	<1.0
PW18	09/10/1991	--	--	--	--	<0.3	--	0.8	--	--	--	--	--	--	--
PW18	11/21/1991	--	--	--	--	<0.3	--	--	0.6	<0.3	--	--	--	--	--
PW18	06/11/1992	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	--	<0.5	<0.5	<40	<0.5	<0.5	<1.0	<1.0
PW18	09/22/1992	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	<1.0	<0.5	<1.0	<1.0
PW18	09/22/1992	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
PW17	05/30/1997	--	5.0	--
PW17	11/26/1997	--	5.0	--
PW17	05/19/1998	--	3.9	--
PW17	06/02/1999	--	4.9	--
PW17	05/02/2000	--	4.0	--
PW17	03/21/2001	<0.50	4.0	<1.0
PW17	05/08/2002	<5.0	3.3 j	<5.0
PW17	04/17/2003	--	6.2	<1.0
PW17	05/12/2004	--	2.6	<0.20
PW17	05/10/2005	--	3.0	<1.0
PW17	05/10/2005	--	3.3	<1.0
PW17	10/25/2005	--	3.2	<1.0
PW17	10/25/2005	--	3.1	<1.0
PW17	05/24/2006	--	3.3	<1.0
PW17	05/24/2006	--	2.9	<1.0
PW17	10/23/2006	--	3.1	<1.0
PW17	10/23/2006	--	3.1	<1.0
PW17	05/21/2007	--	3.2	<1.0
PW17	05/21/2007	--	3.1	<1.0
PW17-BTM	12/02/2004	--	3.5	--
PW17-TOP	12/02/2004	--	3.0	--
PW18	11/25/1987	<1.0	36	<1.5
PW18	12/03/1987	--	25	--
PW18	12/11/1987	--	6.9	--
PW18	12/21/1987	--	22	--
PW18	01/13/1988	--	21	--
PW18	02/04/1988	--	18	--
PW18	03/21/1988	--	27	--
PW18	05/18/1988	--	27	--
PW18	07/27/1988	--	30	--
PW18	09/01/1988	--	25	--
PW18	11/18/1988	--	25	--
PW18	04/07/1989	<1.0	16	<1.5
PW18	05/15/1989	--	16	--
PW18	08/16/1989	--	16	--
PW18	10/23/1989	--	16	--
PW18	01/02/1990	<5.0	15	<7.5
PW18	05/08/1990	--	15	--
PW18	08/20/1990	--	12	--
PW18	12/11/1990	--	11	--
PW18	03/11/1991	--	10	<1.5
PW18	06/18/1991	<0.2	10	<1.0
PW18	06/18/1991	--	10	<1.5
PW18	09/10/1991	--	13	--
PW18	11/21/1991	--	8.6	--
PW18	06/11/1992	<0.8	9.9	<1.5
PW18	09/22/1992	--	16	<1.5
PW18	09/22/1992	--	16	<1.5

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
PW18	11/24/1992	--	--	--	--	--	--	--	<0.5	--	--	--	--	--	--
PW18	03/29/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
PW18	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
PW18	09/08/1993	--	--	--	--	<0.3	--	--	0.7	<0.3	--	--	--	--	--
PW18	11/11/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
PW18	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
PW18	10/25/1994	<0.3	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	<40	<1.0	<0.5	<1.0	<1.0
PW18	05/24/1995	--	--	--	--	<0.3	--	--	0.5	<0.3	--	--	--	--	--
PW18	09/25/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
PW18	08/02/1996	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	<40	<0.50	0.94	1.6 b	<0.50
PW18	11/20/1996	--	--	--	--	<0.5	--	--	<1.0	<1.0	--	--	--	--	--
PW18	05/30/1997	--	--	--	--	<0.50	--	--	0.65	<0.50	--	--	--	--	--
PW18	05/30/1997	--	--	--	--	<0.50	--	--	0.63	<0.50	--	--	--	--	--
PW18	11/26/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
PW18	05/19/1998	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
PW18	06/02/1999	--	--	--	--	<0.50	--	--	0.59	<0.50	--	--	--	--	--
PW18	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
PW18	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
PW18	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
PW18	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
PW18	05/21/2007	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W10	10/02/1984	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND s	ND	ND	ND
W10	10/18/1984	--	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND s	ND
W10	07/17/1985	--	ND s	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND	ND
W10	06/02/1986	--	ND	ND	ND	ND	ND	--	ND	ND	--	--	ND	ND	ND
W10	06/24/1986	--	ND	ND	ND	ND	ND	--	ND	ND	--	--	ND	ND	ND
W10	08/02/1996	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	40	<0.50	<0.50	1.8 b	<0.50
W13	06/02/1986	--	0.6 *	<1.0	<0.2	<0.3	<0.2	--	--	2.0	--	--	0.5 *	<1.0	<1.0
W13	06/25/1986	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	<0.3	--	--	<0.5	<1.0	<1.0
W13	07/18/1986	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	--	<0.3	--	--	<0.5	<1.0	<1.0
W13	11/27/1986	--	<1.0	<1.0	<0.2	6.4	1.5	--	--	1.1	--	--	2.1 b	5.8 b	<1.0
W13	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
W13	08/16/1989	--	--	--	--	<0.30	--	1.6	--	--	--	--	--	--	--
W13	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
W13	01/02/1990	--	--	--	--	<0.3	--	--	0.9	<0.3	--	--	--	--	--
W13	05/08/1990	--	--	--	--	<0.3	--	--	1.8	<0.3	--	--	--	--	--
W13	12/11/1990	--	--	--	--	<0.3	--	--	1.6	<0.3	--	--	--	--	--
W13	03/11/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	0.5	<0.3	--	--	<0.5	<1.0	<1.0
W13	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
W13	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	0.7	<0.3	--	--	<0.5	<1.0	<1.0
W13	11/21/1991	--	--	--	--	<0.3	--	--	1.3	<0.3	--	--	--	--	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
PW18	11/24/1992	--	16	--
PW18	03/29/1993	--	15	--
PW18	07/14/1993	--	13	--
PW18	09/08/1993	--	19	--
PW18	11/11/1993	--	13	--
PW18	05/12/1994	--	9.7	--
PW18	10/25/1994	<1.0	11	<1.5
PW18	05/24/1995	--	9.8	--
PW18	09/25/1995	--	16	--
PW18	08/02/1996	<0.50	9.2	<1.0
PW18	11/20/1996	--	5.9	--
PW18	05/30/1997	--	11	--
PW18	05/30/1997	--	11	--
PW18	11/26/1997	--	11	--
PW18	05/19/1998	--	9.9	--
PW18	06/02/1999	--	11	--
PW18	05/02/2000	--	8.2	--
PW18	03/21/2001	<0.50	8.5	<1.0
PW18	05/08/2002	<5.0	7.9	<5.0
PW18	04/17/2003	--	12	<1.0
PW18	05/12/2004	--	6.1	<0.20
PW18	12/02/2004	--	9.5	--
PW18	12/02/2004	--	9.8	--
PW18	05/10/2005	--	5.8	<1.0
PW18	10/25/2005	--	4.5	<1.0
PW18	05/24/2006	--	5.2	<1.0
PW18	10/23/2006	--	8.6	<1.0
PW18	05/21/2007	--	6.6	<1.0
W10	10/02/1984	1.4 s	ND	ND
W10	10/18/1984	2.4 s	1.7 s	ND
W10	07/17/1985	ND	ND	ND
W10	06/02/1986	--	ND s	ND
W10	06/24/1986	--	ND	ND
W10	08/02/1996	<0.50	<0.50	<1.0
W13	06/02/1986	--	32	<1.5
W13	06/25/1986	--	1.7	<1.5
W13	07/18/1986	--	1.2	<1.5
W13	11/27/1986	--	4.4 b	<1.5
W13	05/15/1989	--	9.1	--
W13	08/16/1989	--	21	--
W13	10/23/1989	--	9.6	--
W13	01/02/1990	--	8.7	--
W13	05/08/1990	--	33	--
W13	12/11/1990	--	9.4	--
W13	03/11/1991	--	14	<1.5
W13	06/18/1991	<0.2	9.2	<1.0
W13	06/18/1991	--	7.9	<1.5
W13	11/21/1991	--	9.8	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
W13	03/18/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W13	03/18/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W13	06/11/1992	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	--	1.4	<0.5	<40	<0.5	<0.5	<1.0	<1.0
W13	11/24/1992	--	--	--	--	--	--	--	0.7	--	--	--	--	--	--
W13	07/14/1993	--	--	--	--	<0.3	--	--	1.0	<0.3	--	--	--	--	--
W13	11/11/1993	--	--	--	--	<0.3	--	--	0.7	<0.3	--	--	--	--	--
W13	05/12/1994	--	--	--	--	<0.5	--	--	2.2	<0.5	--	--	--	--	--
W13	10/25/1994	<0.3	<0.5	<1.0	<0.2	<0.3	<0.2	--	2.6	<0.3	<40	<1.0	<0.5	<1.0	<1.0
W13	05/24/1995	--	--	--	--	<0.3	--	--	2.0	<0.3	--	--	--	--	--
W13	09/25/1995	--	--	--	--	<0.3	--	--	1.0	<0.3	--	--	--	--	--
W13	08/02/1996	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	2.4	<1.0	<40	<0.50	<0.50	3.7 b	<0.50
W13	11/20/1996	--	--	--	--	<0.5	--	--	1.4	<1.0	--	--	--	--	--
W13	05/30/1997	--	--	--	--	<0.50	--	--	2.6	<0.50	--	--	--	--	--
W13	11/26/1997	--	--	--	--	<0.50	--	--	2.2	<0.50	--	--	--	--	--
W13	05/19/1998	--	--	--	--	<0.50	--	--	3.3	<0.50	--	--	--	--	--
W13	06/02/1999	--	--	--	--	<0.50	--	--	5.5	<0.50	--	--	--	--	--
W13	05/02/2000	--	--	--	<0.30	<0.20	--	--	1.3	<0.30	--	--	--	--	--
W13	04/17/2003	--	--	--	--	<1.0	--	--	2.4	<1.0	--	--	--	--	--
W13	05/12/2004	--	--	--	--	<1.0	--	--	2.9	<1.0	--	--	--	--	--
W13	12/02/2004	--	--	--	--	<1.0	--	--	2.6	<1.0	--	--	--	--	--
W13	05/10/2005	--	--	--	--	<1.0	--	--	2.2	<1.0	--	--	--	--	--
W13	10/25/2005	--	--	--	--	<1.0	--	--	2.1	<1.0	--	--	--	--	--
W13	05/24/2006	--	--	--	--	<1.0	--	--	2.9	<1.0	--	--	--	--	--
W13	10/23/2006	--	--	--	--	<1.0	--	--	1.6	<1.0	--	--	--	--	--
W13	05/21/2007	--	--	--	--	<1.0	--	--	1.7	<1.0	--	--	--	--	--
W13-BTM	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	1.6	<0.50	<10	<0.50	<0.50	<5.0	<0.50
W13-BTM	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
W13-TOP	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
W13-TOP	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	6.0	<5.0	<20	<5.0	<5.0	<10	<5.0
W14	05/15/1989	--	--	--	--	<0.20	--	<0.50	--	--	--	--	--	--	--
W14	10/23/1989	--	--	--	--	<0.3	--	<0.3	--	--	--	--	--	--	--
W14	05/08/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	12/11/1990	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	06/18/1991	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	--	<0.2	<0.1	<20	<0.2	<0.1	<0.5	<0.2
W14	06/18/1991	--	<0.5	<1.0	<0.2	<0.3	<0.2	--	<0.5	<0.3	--	--	<0.5	<1.0	<1.0
W14	11/21/1991	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	06/11/1992	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	07/14/1993	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	05/12/1994	--	--	--	--	<0.5	--	--	<0.5	<0.5	--	--	--	--	--
W14	05/24/1995	--	--	--	--	<0.3	--	--	<0.5	<0.3	--	--	--	--	--
W14	08/02/1996	--	<0.50	<1.0	<0.50	<0.50	<0.50	--	<1.0	<1.0	--	--	<0.50	6.4 b	<0.50
W14	05/30/1997	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
W14	05/19/1998	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
W14	06/02/1999	--	--	--	--	<0.50	--	--	<0.50	<0.50	--	--	--	--	--
W14	05/02/2000	--	--	--	<0.30	<0.20	--	--	<0.30	<0.30	--	--	--	--	--
W14	03/21/2001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<10	<0.50	<0.50	<5.0	<0.50
W14	05/08/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<20	<5.0	<5.0	<10	<5.0
W14	04/17/2003	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--

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Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
W13	03/18/1992	--	7.7	--
W13	03/18/1992	--	7.1	--
W13	06/11/1992	<0.8	<0.5	<1.5
W13	11/24/1992	--	22	--
W13	07/14/1993	--	31	--
W13	11/11/1993	--	9.5	--
W13	05/12/1994	--	15	--
W13	10/25/1994	<1.0	15	<1.5
W13	05/24/1995	--	10	--
W13	09/25/1995	--	16	--
W13	08/02/1996	0.55	9.9	<1.0
W13	11/20/1996	--	5.7	--
W13	05/30/1997	--	16	--
W13	11/26/1997	--	11	--
W13	05/19/1998	--	11	--
W13	06/02/1999	--	22	--
W13	05/02/2000	--	24	--
W13	04/17/2003	--	21	<1.0
W13	05/12/2004	--	18	<0.20
W13	12/02/2004	--	20	--
W13	05/10/2005	--	20	<1.0
W13	10/25/2005	--	21	<1.0
W13	05/24/2006	--	17	<1.0
W13	10/23/2006	--	17	<1.0
W13	05/21/2007	--	16 *	<1.0
W13-BTM	03/21/2001	<0.50	54	<1.0
W13-BTM	05/08/2002	1.1 j	18	<5.0
W13-TOP	03/21/2001	<0.50	7.4	<1.0
W13-TOP	05/08/2002	<5.0	13	<5.0
W14	05/15/1989	--	<0.50	--
W14	10/23/1989	--	<0.5	--
W14	05/08/1990	--	<0.5	--
W14	12/11/1990	--	<0.5	--
W14	06/18/1991	<0.2	<0.1	<1.0
W14	06/18/1991	--	<0.5	<1.5
W14	11/21/1991	--	<0.5	--
W14	06/11/1992	--	<0.5	--
W14	07/14/1993	--	<0.5	--
W14	05/12/1994	--	<0.5	--
W14	05/24/1995	--	<0.5	--
W14	08/02/1996	--	<0.50	<1.0
W14	05/30/1997	--	<0.50	--
W14	05/19/1998	--	<0.50	--
W14	06/02/1999	--	<0.50	--
W14	05/02/2000	--	0.96	--
W14	03/21/2001	<0.50	<0.50	<1.0
W14	05/08/2002	<5.0	<5.0	<5.0
W14	04/17/2003	--	<1.0	<1.0

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	1,1,1,2-Tetrachloro-ethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	1,2-Dichloro-ethane	1,2-Dichloro-ethylene	1,2-Dichloro-ethylene,cis	1,2-Dichloro-ethylene, trans	Acetone	Benzene	Chloroform	Methylene chloride	Tetrachloro-ethylene
W14	05/12/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	12/02/2004	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	05/10/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	10/25/2005	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	05/24/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	10/23/2006	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--
W14	05/21/2007	--	--	--	--	<1.0	--	--	<1.0	<1.0	--	--	--	--	--

Historical Summary
Volatile Organic Compounds
Former Nutting Truck and Caster Co., Faribault, MN

(concentrations in ug/L)

Location	Date	Toluene	Trichloro-ethylene	Vinyl chloride
W14	05/12/2004	--	<1.0	<0.20
W14	12/02/2004	--	<1.0	--
W14	05/10/2005	--	<1.0	<1.0
W14	10/25/2005	--	<1.0	<1.0
W14	05/24/2006	--	<1.0	<1.0
W14	10/23/2006	--	<1.0	<1.0
W14	05/21/2007	--	<1.0	<1.0

Institutional Controls

Institutional Controls for NUTTING TRUCK & CASTER CO

CERCLIS ID: MND006154017

No information has been made publicly available.

Thu, February 28 2008
03:11.39 PM EST
LaVetta Walters

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Institutional Controls Tracking System

Site IC Summary : NUTTING TRUCK & CASTER CO (MND006154017)

Basic Summary — Edit Mode

SITE Edit

ID	Name	Site ID Context	CERCLIS ID	Region	Region Context	State	ICs Required
2264	NUTTING TRUCK & CASTER CO	USEPA Site ID (12-digit)	MND006154017	05	USEPA Region	MN	Under Review

AREA OF IC INTEREST Add/Edit/Delete

ID	Name	Area ID	Area ID Context	Description
3141	Sitewide		Area Of IC Interest	

MEDIA Add/Edit/Delete

ID	Name	Is Media Contaminated
6761	Ground Water	Yes

OBJECTIVE Add/Edit/Delete

ID	Objective Purpose	Description	Required from Decision Document

USE RESTRICTION Add/Edit/Delete

ID	Restriction Type	Description

ENGINEERING CONTROL Add/Edit/Delete

ID	Type	Description

RESOURCE Add/Edit/Delete

ID	IC Document Class	Document Class	Document Category Class	Document Source	Document Life Span	Document Life Span Condition	Document Title	Document ID	Document ID Context	Sensitivity
7523	Monitoring	Five Year Review	Informational	Federal				176739		Public

EVENT Add/Edit/Delete

ID	Name	Event Class	Event Type	Actual Date	Planned Date
7386	Five Year Review	Monitoring	Document Issuance	05-16-2003	

INDIVIDUAL Add/Edit/Delete					
ID	First Name	Last Name	Middle Initial	Phone	Email
3624	Sheila	Sullivan		312-886-5251	sullivan.sheila@epa.gov
3625	Gary	Krueger		651-296-6139	gary.krueger@pca.state.mn.us
3626	Thomas	Kenney		312-886-0708	kenney.thomas@epa.gov

ORGANIZATION Add/Edit/Delete					
ID	Organization Formal Name	Organization Type	Phone	Email	Web Site
3624	MPCA	State Government			
3623	USEPA	Federal Government			

COMMENT Add/Edit	
ID	Comments
1341	Institutional controls in the form of a restrictive covenant are being developed to manage residual contamination left on site.

U.S. Environmental Protection Agency

Institutional Controls Tracking System

Site IC summary : NUTTING TRUCK & CASTER CO (MND006154017)

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Extended Summary | Review Mode | Save

SITE

ID	Name	Site ID Context	CERCLIS ID	Region	Region Context	State	ICs Required
2264	NUTTING TRUCK & CASTER CO	USEPA Site ID (12-digit)	MND006154017	05	USEPA Region	MN	Under Review

AREA OF IC INTEREST

ID	Name	Area ID	Area ID Context	Subarea of	Media	Resource	Individual	Organization
3141	Sitewide		Area Of IC Interest		(6761)			

MEDIA

ID	Name	Is Media Contaminated?	Use Restriction	Objective	Engineering Control
6761	Ground Water	Yes			

OBJECTIVE

ID	Objective Purpose	Description	Required from Decision Document?	Use Restriction	Resources

USE RESTRICTION

ID	Restriction Type	Description	Resource	Event

ENGINEERING CONTROL

ID	Engineering Control Type	Description	Objective

RESOURCE

ID	IC Document Class	Document Class	Document Category Class	Document Source	Document Life Span	Document Life Span Condition	Document Title	Document ID	Document ID Context	Event	Sensitivity
7523	Monitoring	Five Year Review	Informational	Federal				176739		(7386)	Public

EVENT

ID	Name	Event Class	Event Type	Actual Date	Planned Date	Individual	Organization	Sensitivity
7386	Five Year Review	Monitoring	Document Issuance	05-16-2003		(3624, Remedial Project Manager) (3626, EPA Attorney)	(3623, Issuing Organization)	Restricted (Confidential)

INDIVIDUAL

ID	First Name	Last Name	Middle Initial	Phone	Email	Organization
3624	Sheila	Sullivan		312-886-5251	sullivan.sheila@epa.gov	(3623)
3625	Gary	Krueger		651-296-6139	gary.krueger@pca.state.mn.us	(3624)
3626	Thomas	Kenney		312-886-0708	kenney.thomas@epa.gov	(3623)

ORGANIZATION

ID	Organization Formal Name	Organization Type	Phone	Email	Web Site
3624	MPCA	State Government			
3623	USEPA	Federal Government			

COMMENT

ID	Comments
1341	Institutional controls in the form of a restrictive covenant are being developed to manage residual contamination left on site.